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External Fuse and Wire Sizes For Milnor Machines

Read the **separate safety manual** before installing, operating, or servicing

PELLERIN MILNOR CORPORATION POST OFFICE BOX 400, KENNER, LOUISIANA 70063-0400, U.S.A.

Table of Contents
MAEFUSE1CE/25163A

Table of Contents, continued
MAEFUSE1CE/25163A

Table of Contents, continued
MAEFUSE1CE/25163A

Table of Contents, continued
MAEFUSE1CE/25163A

Table of Contents, continued
MAEFUSE1CE/25163A

External Fuse/Breaker, Wiring, and Disconnect Requirements

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An external fuse **or** circuit breaker and a disconnect switch must be provided in the facility for (and dedicated to) the machine. These may be in the same or separate, **permanently mounted** electric boxes. Electric power and ground connections will be made between the incoming power junction box on the machine and this external box (or one of the boxes).

1. Fuse or Circuit Breaker Size

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Refer to the “External Fuse and Wire Sizes...” document for your machine model. This document will be found in the machine's installation manual, available from the parts department. Choose the fuse or circuit breaker from the appropriate column of the table provided, as follows:

If a fuse is used — Match the fuse listed in the “Fuse” column for your machine's voltage. The specified fuse sizes are consistent with the USA National Electric Code (NEC), section 430-52, exception No. 2, Part B, which states: “The rating of a time-delay (dual-element) fuse shall be permitted to be increased, but shall in no case exceed 225 percent of the full-load current.”

If a standard circuit breaker is used — Match the amperage rating listed in the “Breaker” column for your machine's voltage.

If an inverse time circuit breaker is used — Match the characteristics (amperage rating) of the fuse listed in the “Fuse” column for your machine's voltage. When applied to an inverse time circuit breaker, the specified fuse sizes are consistent with the USA National Electric Code (NEC), section 430-52, exception No. 2, Part C, which states: “The rating of an inverse time circuit breaker shall be permitted to be increased, but shall in no case exceed 400 percent for full-load currents of 100 amperes or less.”

2. Wire Size

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Use wiring no smaller than that listed for your machine's voltage in the “Wire size... ”column in the “External Fuse and Wire Sizes...” document. The table value applies to runs up to 50 feet (15 meters). Use the next larger size for runs 50 to 100 feet (15 to 30 meters). Use wire two sizes larger for runs greater than 100 feet (30 meters). If an inverse time circuit breaker is used and local codes require a larger wire size than that specified by Milnor, abide by the local code.

NOTICE: The specified wire size may appear too small for the fuse or circuit breaker shown. However, it is consistent with both the load imposed and with the USA National Electric Code.

3. Ground

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The ground wire and connections must ensure a reliable earth ground (zero potential). Use wiring of at least as large a gauge as that required for incoming power. Do not rely on conduit, machine anchorage, etc. Use the ground lug provided in the incoming power junction box on the machine.

4. Disconnect Switch for Lockout/Tagout

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The disconnect switch must permit personnel to disconnect and lockout/tagout electric power from the machine. In the USA, refer to OSHA standard 1910.147 “The control of hazardous energy (lockout/tagout)”. Refer to the USA National Electric Code for requirements on locating the switch. In other locales, abide by these standards if no other local codes apply.

5. Using GFCI (Ground Fault Circuit Interrupter) Device

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The AC Drive will most likely cause the GFCI protection device to trip. The reason the AC Drive will cause this tripping of the GFCI is the Common Mode Current or Common Mode Noise (CM Noise) that the VFD is producing.

Use a GFCI with a higher trip level.

NOTE: Choose a GFCI designed specifically for an AC drive. The operation time should be at least 0.1 s with sensitivity amperage of at least 200 mA per drive. The output waveform of the drive may cause an increase in leakage current. This may in turn cause the leakage breaker to malfunction. Increase the sensitivity amperage or lower the carrier frequency to correct the problem.

Use a type B GFCI according to IEC/EN 60755.

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1 Washer Extractors and Textile Machines

External Fuse or Breaker and Wire Sizes for Washer-extractors

MCR09E5, MWR09E5, MCR12E5, MWR12E5, MWT12E5, MWR12J5, MWT12J5, MWR12X5, MWT12X5

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Table 1. Specifications (Largest motor: 1 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
37	120	7	1	60	FRN15	15	14 / 2.50
46	200	4	3	50	FRN6	6	14 / 2.50
62	220	3	3	50	FRN6	6	14 / 2.50
71/74	208/240	4/3	3	60	FRN6	6	14 / 2.50
71/74	208/240	5/4	1	60	FRN10	10	14 / 2.50
82	380	2	3	50	FRS5	5	14 / 2.50
83	380	2	3	60	FRS5	5	14 / 2.50
84	400	2	3	50	FRS5	5	14 / 2.50
85	415	2	3	50	FRS5	5	14 / 2.50
88	440	1.5	3	50	FRS5	5	14 / 2.50
96	480	1.5	3	60	FRS5	5	14 / 2.50
99	600 to 480	1	3	60	FRS5	5	14 / 2.50

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWR12J5 & MWT12J5 with Electric Heat

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Table 1. Specifications (Largest motor: 1 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	26	3	50	FRN40	40	8 / 10.00
62	220	24	3	50	FRN30	30	10 / 6.00
74	208/240	25 / 23	3	60	FRN30	30	10 / 6.00
82	380	13	3	50	FRS20	20	14 / 2.50
83	380	13	3	60	FRS20	20	14 / 2.50
84	400	13	3	50	FRS20	20	14 / 2.50
85	415	12	3	50	FRS20	20	14 / 2.50
88	440	11	3	50	FRS20	20	14 / 2.50
96	480	10	3	60	FRS20	20	14 / 2.50
99	600 to 480	8	3	60	FRS20	20	14 / 2.50

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate with electric heat operating.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MCR16E5, MCT16E5, MWR16E5, MWT16E5, MWR16J5, MWT16J5, MWR16X5 and MWT16X5

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Table 1. Specifications (Largest motor: 1.5HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	4	3	50	FRN10	10	14 / 2.50
62	220	3	3	50	FRN10	10	14 / 2.50
71/74	208/240	4/3	3	60	FRN10	10	14 / 2.50
71/74	208/240	5/4	1	60	FRN15	15	14 / 2.50
82	380	2	3	50	FRS8	8	14 / 2.50
83	380	2	3	60	FRS8	8	14 / 2.50
84	400	2	3	50	FRS8	8	14 / 2.50
85	415	2	3	50	FRS6	6	14 / 2.50
88	440	1.5	3	50	FRS6	6	14 / 2.50
96	480	1.5	3	60	FRS6	6	14 / 2.50
99	600 to 480	1	3	60	FRS6	6	14 / 2.50

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWR16J5 and MWT16J5 with Electric Heat

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Table 1. Specifications (Largest motor: 1HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	46	3	50	FRN60	60	6 / 16.00
62	220	44	3	50	FRN50	50	8 / 10.00
74	208/240	45 / 43	3	60	FRN50	50	8 / 10.00
82	380	25	3	50	FRS30	30	10 / 6.00
83	380	25	3	60	FRS30	30	10 / 6.00
84	400	25	3	50	FRS30	30	10 / 6.00
85	415	24	3	50	FRS30	30	10 / 6.00
88	440	22	3	50	FRS30	30	10 / 6.00
96	480	20	3	60	FRS30	30	10 / 6.00
99	600 to 480	16	3	60	FRS25	25	10 / 6.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate with electric heat operating.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MCR18E4, MCT18E4, MWR18E4, MWT18E4, MWR18X4, MWT18X4, MWR18J4, MWR18J6, and MWT18J6

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Table 1. Specifications (Largest motor: 3HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	5	3	50	FRN15	15	14 / 2.5
62	220	5	3	50	FRN15	15	14 / 2.5
71/74	208/240	5/4	3	60	FRN15	15	14 / 2.5
71/74	208/240	7/6	1	60	FRN20	20	14 / 2.5
82	380	3.5	3	50	FRS8	15	14 / 2.50
83	380	3.5	3	60	FRS8	15	14 / 2.50
84	400	3.5	3	50	FRS8	15	14 / 2.50
85	415	3.5	3	50	FRS8	15	14 / 2.50
88	440	3	3	50	FRS5	15	14 / 2.50
96	480	3	3	60	FRS5	15	14 / 2.50
99	600 to 480	2.5	3	60	FRS5	15	14 / 2.50

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWR18J4, MWR18J6 and MWT18J6 with Electric Heat (See BFRCBF01 for no steam and steam heat)

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Table 1. Specifications (Largest motor: 3HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	53	3	50	FRN60	60	8 / 10
62	220	49	3	50	FRN60	60	8 / 10
74	208/240	52 / 45	3	60	FRN60	60	8 / 10
82	380	27	3	50	FRS40	40	10 / 6
96	480	24	3	60	FRS30	30	10 / 6

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate with electric heat operating.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MCR27E5, MCT27E5, MWR27E5, MWT27E5, MWR27J5, MWT27J5, MWR27X5 and MWT27X5

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Table 1. Specifications (Largest motor: 4.0HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	6	3	50	FRN15	15	14 / 2.50
62	220	5	3	50	FRN15	15	14 / 2.50
71/74	208/240	8/7	1	60	FRN20	20	14 / 2.50
74	208/240	6/5	3	60	FRN15	15	14 / 2.50
82	380	3.5	3	50	FRS15	15	14 / 2.50
83	380	3.5	3	60	FRS15	15	14 / 2.50
84	400	3.5	3	50	FRS15	15	14 / 2.50
85	415	3.5	3	50	FRS15	15	14 / 2.50
88	440	2.5	3	50	FRS15	15	14 / 2.50
96	480	2.5	3	60	FRS15	15	14 / 2.50
99	600 to 480	2	3	60	FRS15	15	14 / 2.50

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWR27J5 and MWT27J5 with Electric Heat

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Table 1. Specifications (Largest motor: 3.0 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	56	3	50	FRN70	70	6 / 16
62	220	51	3	50	FRN70	70	6 / 16
74	208/240	49 / 45	3	60	FRN70	70	6 / 16
82	380	27	3	50	FRS40	40	10 / 6
83	380	27	3	60	FRS40	40	10 / 6
84	400	27	3	50	FRS40	40	10 / 6
85	415	26	3	50	FRS40	40	10 / 6
88	440	25	3	50	FRS30	30	10 / 6
96	480	23	3	60	FRS30	30	10 / 6
99	600 to 480	20	3	60	FRS30	30	10 / 6

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate with electric heat operating.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MCR36E4, MWR36J4

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Table 1. Specifications (Largest motor: 5.5)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	9	3	50	FRN20	20	12 / 4.00
62	220	9	3	50	FRN20	20	12 / 4.00
66	220	9	3	60	FRN20	20	12 / 4.00
71	240	16	1	60	FRN25	25	12 / 4.00
74	208/240	10/9	3	60	FRN20	20	12 / 4.00
81	346	5.7	3	50	FRS15	15	14 / 2.50
82	380	5.7	3	50	FRS15	15	14 / 2.50
83	380	5.7	3	60	FRS15	15	14 / 2.50
84	400	5.7	3	50	FRS15	15	14 / 2.50
85	415	4.5	3	50	FRS15	15	14 / 2.50
88	440	4.5	3	50	FRS15	15	14 / 2.50
94	440	4.5	3	60	FRS15	15	14 / 2.50
96	480	4.5	3	60	FRS15	15	14 / 2.50
98	600	4.5	3	60	FRS15	15	14 / 2.50

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MCR36E4, MWR36J4

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWB26Z & MWS26Z

BGWK2F01.R01 0000322222 B.2 10/10/24, 6:31 PM Released

Table 1. Specifications

Volt Code	Voltage (VAC) See note 1	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
				Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	3	50	FRN35	35	10 / 6.00
52	208	3	60	FRN35	35	10 / 6.00
62	220	3	50/60	FRN35	35	10 / 6.00
74	240	3	60	FRN30	30	10 / 6.00
82	380	3	50	FRS20	20	12 / 4.00
83	380	3	60	FRS20	20	12 / 4.00
84	400	3	50	FRS20	20	12 / 4.00
85	415	3	50	FRS20	20	12 / 4.00
88	440	3	50	FRS15	15	14 / 2.50
96	480	3	60	FRS15	15	14 / 2.50
99	600 to 480	3	60	FRS15	15	14 / 2.50

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWB26Z (with electric heat)

BGWK2F02.R01 0000395774 C.2 4/25/22, 3:35 PM Released

Table 1. Specifications

Volt Code	Voltage (VAC) See note 1	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
				Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	3	50	See Factory	See Factory	See Factory
52	208	3	60	FRN80	80	6 / 16
62	220	3	50/60	FRN80	80	6 / 16
74	240	3	60	FRN80	80	6 / 16
82	380	3	50	FRS50	50	10 / 6
83	380	3	60	FRS50	50	10 / 6
84	400	3	50	FRS50	50	10 / 6
85	415	3	50	FRS50	50	10 / 6
88	440	3	50	FRS40	40	10 / 6
96	480	3	60	FRS40	40	10 / 6
99	600	3	60	FRS35	35	10 / 6

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard** — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWB45Z

BGWK4F01.R01 0000322226 A.2 10/19/20 2:06 PM Released

Table 1. Specifications

Volt Code	Voltage (VAC) See note 1	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
				Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	3	50	FRN35	35	10 / 6.00
52	208	3	60	FRN35	35	10 / 6.00
62	220	3	50	FRN35	35	10 / 6.00
66	220	3	60	FRN35	35	10 / 6.00
74	240	3	60	FRN30	30	10 / 6.00
81	346	3	50	FRS30	30	10 / 6.00
82	380	3	50	FRS30	30	10 / 6.00
83	380	3	60	FRS30	30	10 / 6.00
84	400	3	50	FRS30	30	10 / 6.00
85	415	3	50	FRS30	30	10 / 6.00
88	440	3	50	FRS25	25	12 / 4.00
94	440	3	60	FRS25	25	12 / 4.00
96	480	3	60	FRS25	25	12 / 4.00
99	600 to 480	3	60	FRS20	20	12 / 4.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWB45Z

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWB45Z (with Electric Heat)

BGWK4F03.R01 0000420031 A.2 4/25/22, 3:34 PM Released

Table 1. Specifications

Volt Code	Voltage (VAC) See note 1	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
				Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	3	50	FRN125	125	2 / 35
52	208	3	60	FRN125	125	2 / 35
62	220	3	50	FRN125	125	2 / 35
66	220	3	60	FRN125	125	2 / 35
74	240	3	60	FRN125	125	2 / 35
81	346	3	50	FRS80	80	6 / 16
82	380	3	50	FRS80	80	6 / 16
83	380	3	60	FRS80	80	6 / 16
84	400	3	50	FRS80	80	6 / 16
85	415	3	50	FRS80	80	6 / 16
88	440	3	50	FRS80	80	6 / 16
94	440	3	60	FRS80	80	6 / 16
96	480	3	60	FRS70	70	8 / 10
98	600	3	60	FRS70	70	10 / 6

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWB45Z (with Electric Heat)

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWB70Z & MWB90Z

BGWK4F02.R01 0000322224 A.2 10/13/20 9:51 AM Released

Table 1. Specifications

Volt Code	Voltage (VAC) See note 1	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
				Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	3	50	FRN60	60	08 / 10.00
52	208	3	60	FRN60	60	08 / 10.00
62	220	3	50	FRN50	50	08 / 10.00
66	220	3	60	FRN50	50	08 / 10.00
74	240	3	60	FRN50	50	08 / 10.00
81	346	3	50	FRS40	40	10 / 6.00
82	380	3	50	FRS40	40	10 / 6.00
83	380	3	60	FRS40	40	10 / 6.00
84	400	3	50	FRS40	40	10 / 6.00
85	415	3	50	FRS40	40	10 / 6.00
88	440	3	50	FRS35	35	10 / 6.00
94	440	3	60	FRS35	35	10 / 6.00
96	480	3	60	FRS35	35	10 / 6.00
99	600 to 480	3	60	FRS25	25	10 / 6.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWB70Z & MWB90Z

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWB70Z (with Electric Heat)

BGWK4F04.R01 0000420029 A.2 4/25/22, 3:32 PM Released

Table 1. Specifications

Volt Code	Voltage (VAC) See note 1	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
				Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	3	50	FRN225	225	000 / 95
52	208	3	60	FRN225	225	000 / 95
62	220	3	50	FRN200	200	00 / 70
66	220	3	60	FRN200	200	00 / 70
74	240	3	60	FRN200	200	00 / 70
81	346	3	50	FRS125	125	2 / 35
82	380	3	50	FRS125	125	2 / 35
83	380	3	60	FRS125	125	2 / 35
84	400	3	50	FRS125	125	2 / 35
85	415	3	50	FRS125	125	2 / 35
88	440	3	50	FRS125	125	2 / 35
94	440	3	60	FRS125	125	2 / 35
96	480	3	60	FRS100	100	4 / 25
98	600	3	60	FRS80	80	6 / 16

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWB70Z (with Electric Heat)

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWB90Z (with Electric Heat)

BGWK4F05.R01 0000420154 A.2 4/27/22, 8:05 AM Released

Table 1. Specifications (Largest motor:)

Volt Code	Voltage (VAC) See note 1	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
				Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	3	50	FRN250	250	300 MCM / 120
52	208	3	60	FRN250	250	300 MCM / 120
62	220	3	50	FRN250	250	300 MCM /120
66	220	3	60	FRN250	250	300 MCM / 120
74	240	3	60	FRN225	225	000 / 95
81	346	3	50	FRS160	160	1 / 50
82	380	3	50	FRS160	160	1 / 50
83	380	3	60	FRS160	160	1 / 50
84	400	3	50	FRS160	160	1 / 50
85	415	3	50	FRS160	160	1 / 50
88	440	3	50	FRS160	160	1 / 50
94	440	3	60	FRS160	160	1 / 50
96	480	3	60	FRS100	100	2 / 35
98	600	3	60	FRS80	80	4 / 25

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWB90Z (with Electric Heat)

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWF100C7, MWF100J7, MWF100Y7, MWF100Z7

BGWMEF01.R02 0000165265 B.2 9/16/20 1:43 PM Released

Table 1. Specifications (Largest motor: 20HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	52	3	50	FRN60	60	04 / 25.00
52	208	50	3	60	FRN60	60	04 / 25.00
62	220	48	3	50	FRN60	60	04 / 25.00
66	220	48	3	60	FRN60	60	04 / 25.00
74	240	42	3	60	FRN60	60	04 / 25.00
81	346	28	3	50	FRS40	40	8 / 10.00
82	380	26	3	50	FRS35	35	8 / 10.00
83	380	26	3	60	FRS35	35	8 / 10.00
84	400	26	3	50	FRS35	35	8 / 10.00
85	415	25	3	50	FRS30	35	8 / 10.00
88	440	25	3	50	FRS30	30	8 / 10.00
94	440	25	3	60	FRS30	30	8 / 10.00
96	480	23	3	50	FRS30	30	8 / 10.00
99	600 to 480	18	3	60	FRS25	25	8 / 10.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

MWF100C7, MWF100J7, MWF100Y7, MWF100Z7

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors 30010 CGE, G5E, G5X

Table 1: Specifications (Largest motor: 1.5 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	5	3	50	FRN10	10	14 / 2.5
62	220	4.5	3	50	FRN10	10	14 / 2.5
71/74	208/240	4	1 or 3	60	FRN10	10	14 / 2.5
82	380	3	3	50	FRS5	5	14 / 2.50
83	380	3	3	60	FRS5	5	14 / 2.50
84	400	3	3	50	FRS5	5	14 / 2.50
85	415	2.5	3	50	FRS5	5	14 / 2.50
88	440	2.5	3	50	FRS5	5	14 / 2.50
96	480	2	3	60	FRS5	5	14 / 2.50
99	600→480	1.5	3	60	FRS5	5	14 / 2.50

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFRMWF01 —

External Fuse or Breaker and Wire Sizes for Washer-extractors 30015 C4A, C4T, M4A, M4G, M4J, M4P, M4T

Table 1: Specifications (Largest motor: .75 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
33	110	14	1	50	FRN20	35	12 / 4.00
37	120	14	1	60	FRN20	35	12 / 4.00
46	200	3.5	3	50	FRN5.6	10	14 / 2.50
55	220	7	1	50	FRN15	25	14 / 2.50
62	220	3	3	50	FRN5.6	10	14 / 2.50
71	208/240	7	1	60	FRN15	25	14 / 2.50
74	208/240	3.3/3	3	60	FRN5.6	10	14 / 2.50
82	380	2	3	50	FRS2.5	6	14 / 2.50
84	400	1.5	3	50	FRS2.5	6	14 / 2.50
96	480	1.5	3	60	FRS2.5	6	14 / 2.50
99	600→480	1.2	3	60	FRS2	4	14 / 2.50

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFRMMF01 —

External Fuse or Breaker and Wire Sizes for Washer-extractors 30015 M6G, M6J, M6P, J4P

Table 1: Specifications (Largest motor: 1.5 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	6	3	50	FRN10	20	14 / 2.50
62	220	5.5	3	50	FRN10	20	14 / 2.50
74	208/240	5	3	60	FRN10	20	14 / 2.50
82	380	3	3	50	FRS06	15	14 / 2.50
84	400	3	3	50	FRS06	15	14 / 2.50
88	440	2.5	3	50	FRS04	6	14 / 2.50
96	480	2.5	3	60	FRS04	6	14 / 2.50
99	600→480	2	3	60	FRS04	6	14 / 2.50

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFRMMF02 —

External Fuse or Breaker and Wire Sizes for Washer-extractors 30015 K5A, K5T, S5A, S5T, S5G, S5J

Table 1: Specifications (Largest motor: 2/.5 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	8.5	3	50	FRN20	30	14 / 2.50
62	220	7.7	3	50	FRN20	30	14 / 2.50
71	240	16	1	60	FRN30	60	10 / 6.00
74	208/240	7	3	60	FRN20	30	14 / 2.50
82	380	4.5	3	50	FRS08	15	14 / 2.50
83	380	4.5	3	60	FRS08	15	14 / 2.50
84	400	4.3	3	50	FRS08	15	14 / 2.50
85	415	4.2	3	50	FRS08	15	14 / 2.50
88	440	4	3	50	FRS08	15	14 / 2.50
96	480	3.7	3	60	FRS08	15	14 / 2.50
99	600→480	3.0	3	60	FRS06	15	14 / 2.50

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFRMSF01 —

External Fuse or Breaker and Wire Sizes for Washer-extractors

30015C4E, CGE, G5E, G5X, T5E, T5J, T5X; 30022C4E, T5E, T5J, T5X; MWR18J6

BGWCCF03.R01 0000165279 A.2 10/27/17 10:53 AM Released

Table 1 Specifications (Largest motor: 3.0HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	8	3	50	FRN15	15	14 / 2.50
62	220	7	3	50/60	FRN15	15	14 / 2.50
71/74	208/240	14/12	1	60	FRN20	20	14 / 2.50
74	208/240	8/7	3	60	FRN15	15	14 / 2.50
82	380	4.5	3	50	FRS15	15	14 / 2.50
83	380	4.5	3	60	FRS15	15	14 / 2.50
84	400	4.5	3	50	FRS15	15	14 / 2.50
85	415	4.5	3	50	FRS15	15	14 / 2.50
88	440	3.5	3	50	FRS15	15	14 / 2.50
96	480	3.5	3	60	FRS15	15	14 / 2.50
99	600 to 480	3.5	3	60	FRS15	15	14 / 2.50

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

30015V7J, V8Z; 30022V6J, F8J, F8W, H7J, H8J, J8P, X8J, X8W, V8Z, X8R; 36021C4E; MWF18J8, MWF27J8, MWF27Z8

BGWOAF01.R01 0000165294 C.2 3/19/24, 12:02 PM Released

Table 1. Specifications (Largest motor: 5HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	13	3	50	FRN20	20	12 / 4.00
62	220	13	3	50/60	FRN20	20	12 / 4.00
71	208/240	16/15	1	60	FRN25	25	12 / 4.00
71/74	208/240	14/13	3	60	FRN20	20	12 / 4.00
82	380	8	3	50	FRS15	15	14 / 2.50
83	380	8	3	60	FRS15	15	14 / 2.50
84	400	8	3	50	FRS15	15	14 / 2.50
85	415	8	3	50	FRS15	15	14 / 2.50
88	440	7	3	50	FRS15	15	14 / 2.50
96	480	7	3	60	FRS15	15	14 / 2.50
99	600 to 480	6	3	60	FRS15	15	14 / 2.50

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

30015V7J, VRJ, V8Z with Electric Heat (18KW)

BGWOAF03.R01 0000165391 C.2 8/14/19 10:26 AM Released

Table 1. Specifications (Largest motor: 5.0HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	58	3	50	FRN70	70	6 / 16.00
62	220	52	3	50/60	FRN70	70	6 / 16.00
74	208/240	57/48	3	60	FRN70	70	6 / 16.00
82	380	28	3	50	FRS40	40	8 / 10.00
83	380	28	3	60	FRS40	40	8 / 10.00
84	400	27	3	50	FRS40	40	8 / 10.00
85	415	26	3	50	FRS40	40	8 / 10.00
88	440	24	3	50	FRS40	40	10 / 6.00
96	480	22	3	60	FRS40	40	10 / 6.00
99	600 to 480	17	3	60	FRS40	40	10 / 6.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate with electric heat operating.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

30015 & 30022T6X

BGWOAF04.R01 0000165389 B.2 7/5/21 9:47 AM Released

Table 1. Specifications (Largest motor: 4.0HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	8	3	50	FRN15	15	14 / 2.50
62	220	7	3	50/60	FRN15	15	14 / 2.50
71/74	208/240	9.5/8.5	1	60	FRN20	20	14 / 2.50
74	208/240	8/7	3	60	FRN15	15	14 / 2.50
82	380	4.5	3	50	FRS15	15	14 / 2.50
83	380	4.5	3	60	FRS15	15	14 / 2.50
84	400	4.5	3	50	FRS15	15	14 / 2.50
85	415	4.5	3	50	FRS15	15	14 / 2.50
88	440	3.5	3	50	FRS15	15	14 / 2.50
96	480	3.5	3	60	FRS15	15	14 / 2.50
99	600 to 480	3.5	3	60	FRS15	15	14 / 2.50

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

30015 & 30022VRJ

BGWOAF08.R01 0000351575 A.2 7/5/21 10:03 AM Released

Table 1. Specifications (Largest motor: 5HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	11	3	50	FRN20	20	12 / 4.00
62	220	11	3	50/60	FRN20	20	12 / 4.00
71	208/240	12/11	1	60	FRN25	25	12 / 4.00
71/74	208/240	10/9	3	60	FRN20	20	12 / 4.00
82	380	6	3	50	FRS15	15	14 / 2.50
83	380	6	3	60	FRS15	15	14 / 2.50
84	400	6	3	50	FRS15	15	14 / 2.50
85	415	6	3	50	FRS15	15	14 / 2.50
88	440	5	3	50	FRS15	15	14 / 2.50
96	480	5	3	60	FRS15	15	14 / 2.50
99	600 to 480	4	3	60	FRS15	15	14 / 2.50

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

30015 & 30022 VZZ

BGWOAF02.R01 0000165408 C.2 7/5/21 9:45 AM Released

Table 1. Specifications (Largest motor: 6.0HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	13	3	50	FRN25	25	12 / 4.00
62	220	13	3	50/60	FRN25	25	12 / 4.00
71	208/240	16/15	1	60	FRN30	30	12 / 4.00
74	208/240	14/13	3	60	FRN20	25	12 / 4.00
82	380	8	3	50	FRS15	15	14 / 2.50
83	380	8	3	60	FRS15	15	14 / 2.50
84	400	8	3	50	FRS15	15	14 / 2.50
85	415	8	3	50	FRS15	15	14 / 2.50
88	440	7	3	50	FRS15	15	14 / 2.50
96	480	7	3	60	FRS15	15	14 / 2.50
99	600 to 480	6	3	60	FRS15	15	14 / 2.50

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

30015VZZ with Electric Heat (18KW)

BGWOAF07.R01 0000249850 A.4 8/14/19 2:16 PM Released

Table 1. Specifications (Largest motor: 6.0HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	58	3	50	FRN70	70	6 / 16.00
62	220	52	3	50	FRN70	70	6 / 16.00
74	208/240	57/48	3	60	FRN70	70	6 / 16.00
82	380	28	3	50	FRS40	40	8 / 10.00
83	380	28	3	60	FRS40	40	8 / 10.00
84	400	27	3	50	FRS40	40	8 / 10.00
85	415	26	3	50	FRS40	40	8 / 10.00
88	440	24	3	50	FRS40	40	10 / 6.00
96	480	22	3	60	FRS40	40	10 / 6.00
99	600 to 480	17	3	60	FRS40	40	10 / 6.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate with electric heat operating.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

30022VZZ with Electric Heat (18KW)

BGWOAF05.R01 0000165406 C.2 8/14/19 10:22 AM Released

Table 1. Specifications (Largest motor: 6.0HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	58	3	50	FRN70	70	6 / 16.00
62	220	52	3	50	FRN70	70	6 / 16.00
74	208/240	57/48	3	60	FRN70	70	6 / 16.00
82	380	28	3	50	FRS40	40	8 / 10.00
83	380	28	3	60	FRS40	40	8 / 10.00
84	400	27	3	50	FRS40	40	8 / 10.00
85	415	26	3	50	FRS40	40	8 / 10.00
88	440	24	3	50	FRS40	40	10 / 6.00
96	480	22	3	60	FRS40	40	10 / 6.00
99	600 to 480	17	3	60	FRS40	40	10 / 6.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate with electric heat operating.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

30022V8Z, VRJ, X8J, X8W, X8R with Electric Heat (18KW); MWF18J8, MWF27J8 & MWF27Z8 with Electric Heat (18KW)

BGWOAF06.R01 0000165404 F.2 3/19/24, 12:07 PM Released

Table 1. Specifications (Largest motor: 5.0HP) Run amps include electric heating

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	58	3	50	FRN70	70	6 / 16.00
62	220	52	3	50	FRN70	70	6 / 16.00
74	208/240	57 / 48	3	60	FRN70	70	6 / 16.00
82	380	28	3	50	FRS40	40	8 / 10.00
83	380	28	3	60	FRS40	40	8 / 10.00
84	400	27	3	50	FRS40	40	8 / 10.00
85	415	26	3	50	FRS40	40	8 / 10.00
88	440	24	3	50	FRS40	40	10 / 6.00
96	480	22	3	60	FRS40	40	10 / 6.00
99	600 to 480	17	3	60	FRS30	30	10 / 6.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate with electric heat operating.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors 30020 C4A, C4T, M4A, M4T, M5G, M5J, M5P 30022 C4A, C4T, M4A, M4T, M5G, M5J, M5P, M5T

Table 1: Specifications (Largest motor: 1.5 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	6	3	50	FRN10	20	14 / 2.50
52	208	5.8	3	60	FRN10	20	14 / 2.50
62	220	5.5	3	50	FRN10	20	14 / 2.50
74	240	5	3	60	FRN10	20	14 / 2.50
82	380	3	3	50	FRS06	15	14 / 2.50
83	380	3	3	60	FRS06	15	14 / 2.50
84	400	3	3	50	FRS06	15	14 / 2.50
85	415	3	3	50	FRS06	15	14 / 2.50
88	440	2.5	3	50	FRS04	6	14 / 2.50
96	480	2.5	3	60	FRS04	6	14 / 2.50
99	600→480	2	3	60	FRS04	6	14 / 2.50

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFRMMF04 —

External Fuse or Breaker and Wire Sizes for Washer-extractors

30020 M7G, M7J, M7P 36021 Q6G, Q6J, Q6P
36026 Q6G, Q6J, Q6P 42026 Q4G, Q4J, Q4P

Table 1: Specifications (Largest motor: 2 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	7.8	3	50	FRN20	30	12 / 4.00
52	208	7.5	3	60	FRN20	30	12 / 4.00
62	220	7	3	50	FRN20	30	12 / 4.00
66	220	7	3	60	FRN20	30	12 / 4.00
74	240	6.5	3	60	FRN20	25	12 / 4.00
81	346	4.5	3	50	FRS15	20	14 / 2.50
82	380	4	3	50	FRS15	15	14 / 2.50
83	380	3.9	3	60	FRS15	15	14 / 2.50
84	400	3.7	3	50	FRS15	15	14 / 2.50
85	415	3.6	3	50	FRS15	15	14 / 2.50
88	440	3.4	3	50	FRS15	15	14 / 2.50
94	440	3.4	3	60	FRS15	15	14 / 2.50
96	480	3.1	3	60	FRS15	15	14 / 2.50
98	600	2.5	3	60	FRS15	15	14 / 2.50

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFRQ3F01 —

External Fuse or Breaker and Wire Sizes for Washer-extractors 30022 K5A, K5T, S5A, S5G, S5J, S5T

Table 1: Specifications (Largest motor: 3/.6 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	11	3	50	FRN20	30	12 / 4.00
62	220	10	3	50	FRN20	30	12 / 4.00
74	208/240	9	3	60	FRN20	30	12 / 4.00
82	380	5.8	3	50	FRS15	15	14 / 2.50
83	380	5.8	3	60	FRS15	15	14 / 2.50
84	400	5.4	3	50	FRS15	15	14 / 2.50
85	415	5.2	3	50	FRS15	15	14 / 2.50
88	440	4.9	3	50	FRS15	15	14 / 2.50
96	480	4.5	3	60	FRS15	15	14 / 2.50
99	600→480	3.6	3	60	FRS08	15	14 / 2.50

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFRMSF02 —

External Fuse or Breaker and Wire Sizes for Washer-extractors 36021F8P

Table 1: Specifications (Largest motor: 7.5 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	18.5	3	50	FRN30	35	10 / 6.00
52	208	17.8	3	60	FRN30	35	10 / 6.00
62	220	16.8	3	50	FRN25	30	10 / 6.00
66	220	16.8	3	60	FRN25	30	10 / 6.00
74	240	15.4	3	60	FRN25	30	10 / 6.00
81	346	10.7	3	50	FRS15	20	14 / 2.50
82	380	9.7	3	50	FRS15	20	14 / 2.50
83	380	9.7	3	60	FRS15	20	14 / 2.50
84	400	9.3	3	50	FRS15	20	14 / 2.50
85	415	8.9	3	50	FRS15	15	14 / 2.50
88	440	8.4	3	50	FRS15	15	14 / 2.50
94	440	8.4	3	60	FRS15	15	14 / 2.50
96	480	7.7	3	60	FRS15	15	14 / 2.50
98	600	6.2	3	60	FRS15	15	14 / 2.50

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFEONF01 —

External Fuse or Breaker and Wire Sizes for Washer-extractors 36021 Q4G, Q4J, Q4P 36026 Q4G, Q4J, Q4P

Table 1: Specifications (Largest motor: 1.5 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	6	3	50	FRN15	25	14 / 2.50
52	208	5.75	3	60	FRN15	25	14 / 2.50
62	220	5.4	3	50	FRN15	20	14 / 2.50
66	220	5.4	3	60	FRN15	20	14 / 2.50
74	240	5	3	60	FRN15	20	14 / 2.50
81	346	3.5	3	50	FRS15	15	14 / 2.50
82	380	3.2	3	50	FRS15	15	14 / 2.50
83	380	3.2	3	60	FRS15	15	14 / 2.50
84	400	3	3	50	FRS15	15	14 / 2.50
85	415	2.9	3	50	FRS15	15	14 / 2.50
88	440	2.7	3	50	FRS15	15	14 / 2.50
94	440	2.7	3	60	FRS15	15	14 / 2.50
96	480	2.5	3	60	FRS15	15	14 / 2.50
98	600	2	3	60	FRS15	15	14 / 2.50

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFRQ3F02 —

External Fuse or Breaker and Wire Sizes for Washer-extractors 36021 BWP, CPE, NSP, Q7G, Q7J, Q7P 36026 Q7G, Q7J, Q7P 42026 Q6G, Q6J, Q6P

Table 1: Specifications (Largest motor: 3 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	11	3	50	FRN25	45	10 / 6.00
52	208	10.5	3	60	FRN25	45	10 / 6.00
62	220	10	3	50	FRN25	40	10 / 6.00
66	220	10	3	60	FRN25	40	10 / 6.00
74	240	9	3	60	FRN25	35	10 / 6.00
81	346	6.5	3	50	FRS15	25	14 / 2.50
82	380	6	3	50	FRS15	25	14 / 2.50
83	380	6	3	60	FRS15	25	14 / 2.50
84	400	5.5	3	50	FRS15	20	14 / 2.50
85	415	5.3	3	50	FRS15	20	14 / 2.50
88	440	5	3	50	FRS15	20	14 / 2.50
94	440	5	3	60	FRS15	20	14 / 2.50
96	480	4.6	3	60	FRS15	20	14 / 2.50
98	600	3.7	3	60	FRS15	15	14 / 2.50

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFRBUF01 —

External Fuse or Breaker and Wire Sizes for Washer-extractors

36021 & 36026V5J, V5Z

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Table 1 Specifications (Largest motor: 5HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	9	3	50	FRN20	20	12 / 4.00
62	220	9	3	50	FRN20	20	12 / 4.00
66	220	9	3	60	FRN20	20	12 / 4.00
71	240	16	1	60	FRN25	25	12 / 4.00
74	208/240	10/9	3	60	FRN20	20	12 / 4.00
81	346	5.7	3	50	FRS15	15	14 / 2.50
82	380	5.7	3	50	FRS15	15	14 / 2.50
83	380	5.7	3	60	FRS15	15	14 / 2.50
84	400	5.7	3	50	FRS15	15	14 / 2.50
85	415	4.5	3	50	FRS15	15	14 / 2.50
88	440	4.5	3	50	FRS15	15	14 / 2.50
94	440	4.5	3	60	FRS15	15	14 / 2.50
96	480	4.5	3	60	FRS15	15	14 / 2.50
98	600	4.5	3	60	FRS15	15	14 / 2.50

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

36021 & 36026V5J, V5Z

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

36021V7J, V7Z; 36026V7J, V7W, V7Z; 42026V5J, V6J, V6W, V6Z

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Table 1. Specifications (Largest motor: 10HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	22	3	50	FRN30	30	10 / 6.00
62	220	20	3	50	FRN30	30	10 / 6.00
66	220	20	3	60	FRN30	30	10 / 6.00
74	208/240	21/19	3	60	FRN30	30	10 / 6.00
81	346	13	3	50	FRS20	20	12 / 2.50
82	380	12	3	50	FRS20	20	12 / 2.50
83	380	12	3	60	FRS20	20	12 / 2.50
84	400	11	3	50	FRS15	15	14 / 2.50
85	415	11	3	50	FRS15	15	14 / 2.50
88	440	10	3	50	FRS15	15	14 / 2.50
94	440	10	3	60	FRS15	15	14 / 2.50
96	480	8	3	60	FRS15	15	14 / 2.50
98	600	6	3	60	FRS15	15	14 / 2.50

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

36021V7J, V7Z; 36026V7J, V7W, V7Z; 42026V5J, V6J, V6W, V6Z

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

36021V5Z, V7J, V7Z; 36026V5Z, V7J, V7W, V7Z with Electric heat (27KW)

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Table 1. Specifications (Largest motor: for V5: is 5HP; for V7_ is 10HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	108	3	50	FRN130	130	2 / 35
62	220	92	3	50	FRN125	125	2 / 35
66	220	92	3	60	FRN125	125	2 / 35
74	208/240	84	3	60	FRN125	125	2 / 35
81	346	60	3	50	FRS80	80	4 / 25
82	380	55	3	50	FRS80	80	4 / 25
83	380	55	3	60	FRS80	80	4 / 25
84	400	52	3	50	FRS80	80	4 / 25
85	415	50	3	50	FRS80	80	4 / 25
88	440	47	3	50	FRS70	70	4 / 25
94	440	47	3	60	FRS70	70	4 / 25
96	480	42	3	60	FRS70	70	4 / 25
98	600	34	3	60	FRS60	60	6 / 25

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate with electric heat operating.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

36021V5Z, V7J, V7Z; 36026V5Z, V7J, V7W, V7Z with Electric heat (27KW)

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

36026X8J, X8W, X8R; 36030F8J, F8W, F8P, F8R, F8S, J8P; MWF36J8, MWF36Z8, MWF45J8 & MWF45Z8

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Table 1. Specifications (Largest motor: 10HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	24	3	50	FRN40	40	10 / 6.00
52	208	24	3	60	FRN40	40	10 / 6.00
62	220	23	3	50	FRN40	40	10 / 6.00
66	220	23	3	60	FRN40	40	10 / 6.00
74	240	21	3	60	FRN40	40	10 / 6.00
81	346	18	3	50	FRS25	25	12 / 4.00
82	380	16	3	50	FRS25	25	12 / 4.00
83	380	16	3	60	FRS25	25	12 / 4.00
84	400	16	3	50	FRS25	25	12 / 4.00
85	415	14	3	50	FRS25	25	12 / 4.00
88	440	13	3	50	FRS20	20	12 / 4.00
94	440	13	3	60	FRS20	20	12 / 4.00
96	480	13	3	60	FRS20	20	12 / 4.00
99	600 to 480	10	3	60	FRS20	20	12 / 4.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

36026X8J, X8W, X8R; 36030F8J, F8W, F8P, F8R, F8S, J8P; MWF36J8, MWF36Z8, MWF45J8 & MWF45Z8

CAUTION: Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

36026X8J, X8W, X8R with Electric Heat; MWF36J8, MWF36Z8, MWF45J8 & MWF45Z8 with Electric Heat (36KW)

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Table 1. Specifications (Largest motor: 10HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	112	3	50	FRN150	150	1 / 50.00
52	208	107	3	60	FRN150	150	1 / 50.00
62	220	102	3	50	FRN150	150	1 / 50.00
66	220	102	3	60	FRN150	150	1 / 50.00
74	240	97	3	60	FRN150	150	1 / 50.00
81	346	52	3	50	FRS80	80	4 / 25.00
82	380	55	3	50	FRS80	80	4 / 25.00
83	380	55	3	60	FRS80	80	4 / 25.00
84	400	54	3	50	FRS80	80	4 / 25.00
85	415	53	3	50	FRS80	80	4 / 25.00
88	440	51	3	50	FRS80	80	4 / 25.00
94	440	51	3	60	FRS80	80	4 / 25.00
96	480	47	3	60	FRS80	80	4 / 25.00
99	600 to 480	39	3	60	FRS60	60	6 / 16.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate with electric heat operating.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

36026X8J, X8W, X8R with Electric Heat; MWF36J8, MWF36Z8, MWF45J8 & MWF45Z8 with Electric Heat (36KW)

CAUTION: Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors 42026 P5A

Table 1: Specifications (Largest motor: 7.5 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
52	208	32	3	60	FRN50	50	08 / 10.00
62	220	30	3	50	FRN50	50	08 / 10.00
74	240	28	3	60	FRN50	50	08 / 10.00
82	380	18	3	50	FRS30	30	10 / 6.00
84	400	17	3	50	FRS30	30	10 / 6.00
96	480	14	3	60	FRS25	25	10 / 6.00
98	600	11	3	60	FRS20	20	12 / 4.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFMXCF02 —

External Fuse or Breaker and Wire Sizes for Washer-extractors
42026 QHP,QTL,QTN
42031 CP2, CP3, NP2, NP3, SP2, SP3, WP2, WP3

Table 1: Specifications (Largest motor: 5 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	17.5	3	50	FRN35	70	10 / 6.00
52	208	17	3	60	FRN35	70	10 / 6.00
62	220	16	3	50	FRN35	70	10 / 6.00
74	240	14.5	3	60	FRN30	60	10 / 6.00
81	346	10	3	50	FRS25	40	14 / 2.50
82	380	9	3	50	FRS20	35	14 / 2.50
83	380	9	3	60	FRS20	35	14 / 2.50
84	400	9	3	50	FRS17.5	35	14 / 2.50
85	415	8.5	3	50	FRS17.5	35	14 / 2.50
88	440	8	3	50	FRS17.5	35	14 / 2.50
96	480	7	3	60	FRS15	30	14 / 2.50
98	600	6	3	60	FRS15	25	14 / 2.50

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFHD4F01 —

External Fuse or Breaker and Wire Sizes for Washer-extractors

42026X7J, X7W, X7R; 42032F7J, F7P, F7S, F7W, J7P, F8S, X7J, X7W, X7R; MWF63C7, MWF63J7, MWF63Y7, MWF63Z7, MWF77C7, MWF77J7, MWF77Y7, & MWF77Z7

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Table 1. Specifications (Largest motor: 15HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	41	3	50	FRN50	50	08 / 10.00
52	208	40	3	60	FRN50	50	08 / 10.00
62	220	38	3	50	FRN50	50	08 / 10.00
66	220	38	3	60	FRN50	50	08 / 10.00
74	240	35	3	60	FRN50	50	08 / 10.00
81	346	25	3	50	FRS30	30	10 / 6.00
82	380	23	3	50	FRS30	30	10 / 6.00
83	380	23	3	60	FRS30	30	10 / 6.00
84	400	22	3	50	FRS30	30	10 / 6.00
85	415	21	3	50	FRS25	25	10 / 6.00
88	440	20	3	50	FRS25	25	10 / 6.00
94	440	20	3	60	FRS25	25	10 / 6.00
96	480	19	3	60	FRS25	25	10 / 6.00
99	600 to 480	19	3	60	FRS25	25	10 / 6.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

42026X7J, X7W, X7R; 42032F7J, F7P, F7S, F7W, J7P, F8S, X7J, X7W, X7R; MWF63C7, MWF63J7, MWF63Y7, MWF63Z7, MWF77C7, MWF77J7, MWF77Y7, & MWF77Z7

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

42026X7J, X7W, X7R with Electric Heat; MWF63C7, MWF63J7, MWF63Y7 & MWF63Z7 with Electric Heat (36KW)

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Table 1. Specifications (Largest motor: 15HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	129	3	50	FRN150	150	1 / 50.00
52	208	123	3	60	FRN150	150	1 / 50.00
62	220	117	3	50	FRN150	150	1 / 50.00
66	220	117	3	60	FRN150	150	1 / 50.00
74	240	102	3	60	FRN150	150	1 / 50.00
81	346	53	3	50	FRS80	80	4 / 25.00
82	380	58	3	50	FRS80	80	4 / 25.00
83	380	58	3	60	FRS80	80	4 / 25.00
84	400	57	3	50	FRS80	80	4 / 25.00
85	415	56	3	50	FRS80	80	4 / 25.00
88	440	53	3	50	FRS80	80	4 / 25.00
94	440	53	3	60	FRS80	80	4 / 25.00
96	480	48	3	60	FRS80	80	4 / 25.00
99	600 to 480	38	3	60	FRS60	60	6 / 16.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate with electric heat operating.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

42026X7J, X7W, X7R with Electric Heat; MWF63C7, MWF63J7, MWF63Y7 & MWF63Z7 with Electric Heat (36KW)

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

42026V6J, V6W, V6Z with Electric Heat (36KW)

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Table 1. Specifications (Largest motor: 10HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	128	3	50	FRN150	150	1 / 50
62	220	112	3	50	FRN150	150	1 / 50
66	220	112	3	60	FRN150	150	1 / 50
74	208/240	120/104	3	60	FRN150	150	1 / 50
81	346	70	3	50	FRS80	80	4 / 25
82	380	65	3	50	FRS80	80	4 / 25
83	380	65	3	60	FRS80	80	4 / 25
84	400	62	3	50	FRS80	80	4 / 25
85	415	60	3	50	FRS80	80	4 / 25
88	440	57	3	50	FRS80	80	4 / 25
94	440	57	3	60	FRS80	80	4 / 25
96	480	52	3	60	FRS80	80	4 / 25
98	600	43	3	60	FRS80	80	6 / 25

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate with electric heat operating.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

42026V6J, V6W, V6Z with Electric Heat (36KW)

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

42032X7J, X7W, X7R with Electric Heat; MWF77C7, MWF77J7, MWF77Y7 & MWF77Z7 with Electric Heat (36KW)

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Table 1. Specifications (Largest motor: 15HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	129	3	50	FRN150	150	1 / 50.00
52	208	123	3	60	FRN150	150	1 / 50.00
62	220	117	3	50	FRN150	150	1 / 50.00
66	220	117	3	60	FRN150	150	1 / 50.00
74	240	102	3	60	FRN150	150	1 / 50.00
81	346	53	3	50	FRS80	80	4 / 25.00
82	380	58	3	50	FRS80	80	4 / 25.00
83	380	58	3	60	FRS80	80	4 / 25.00
84	400	57	3	50	FRS80	80	4 / 25.00
85	415	56	3	50	FRS80	80	4 / 25.00
88	440	53	3	50	FRS80	80	4 / 25.00
94	440	53	3	60	FRS80	80	4 / 25.00
96	480	48	3	60	FRS80	80	4 / 25.00
99	600 to 480	38	3	60	FRS60	60	6 / 16.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate with electric heat operating.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

42032X7J, X7W, X7R with Electric Heat; MWF77C7, MWF77J7, MWF77Y7 & MWF77Z7 with Electric Heat (36KW)

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

42030V6J & V6Z

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Table 1 Specifications (Largest motor: 15HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	41	3	50	FRN50	50	08 / 10.00
62	220	38	3	50	FRN50	50	08 / 10.00
66	220	38	3	60	FRN50	50	08 / 10.00
74	208/240	40/35	3	60	FRN50	50	08 / 10.00
81	346	25	3	50	FRS30	30	10 / 6.00
82	380	23	3	50	FRS30	30	10 / 6.00
83	380	23	3	60	FRS30	30	10 / 6.00
84	400	22	3	50	FRS30	30	10 / 6.00
85	415	21	3	50	FRS25	25	10 / 6.00
88	440	20	3	50	FRS25	25	10 / 6.00
94	440	20	3	60	FRS25	25	10 / 6.00
96	480	19	3	60	FRS25	25	10 / 6.00
99	600 to 480	19	3	60	FRS25	25	10 / 6.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

42030V6J & V6Z with Electric Heat

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Table 1. Specifications (Largest motor: 15HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	115	3	50	FRN150	150	1 / 50
62	220	104	3	50	FRN150	150	1 / 50
66	220	104	3	60	FRN150	150	1 / 50
74	208/240	110/95	3	60	FRN150	150	1 / 50
81	346	66	3	50	FRS80	100	4 / 25
82	380	60	3	50	FRS80	80	4 / 25
83	380	60	3	60	FRS80	80	4 / 25
84	400	57	3	50	FRS80	80	4 / 25
85	415	55	3	50	FRS80	80	4 / 25
88	440	52	3	50	FRS80	80	4 / 25
94	440	52	3	60	FRS80	80	4 / 25
96	480	47	3	60	FRS80	80	4 / 25
99	600 to 480	38	3	60	FRS80	80	6 / 25

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate with electric heat operating.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

42030V6J & V6Z with Electric Heat

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors 42044 CP2, CP3, NP2, NP3, SP3, WP3 42044 SP2, WP2 (Multi-motor)

Table 1: Specifications (Largest motor: 7.5 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²)See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	25	3	50	FRN60	100	08 / 10.00
52	208	24	3	60	FRN50	100	08 / 10.00
62	220	23	3	50	FRN50	90	08 / 10.00
66	220	23	3	60	FRN50	90	08 / 10.00
74	240	21	3	60	FRN45	80	08 / 10.00
81	346	14.5	3	50	FRS30	60	10 / 6.00
82	380	13	3	50	FRS30	60	10 / 6.00
83	380	13	3	60	FRS30	60	10 / 6.00
84	400	12.5	3	50	FRS30	50	10 / 6.00
85	415	12	3	50	FRS25	50	10 / 6.00
88	440	11.5	3	50	FRS25	45	10 / 6.00
94	440	11.5	3	60	FRS25	45	10 / 6.00
96	480	10.5	3	60	FRS25	40	12 / 4.00
98	600	8.5	3	60	FRS20	35	12 / 4.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

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External Fuse or Breaker and Wire Sizes for Washer-extractors

42044SP2, WP2, SR2, WR2 (Single Motor)

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Table 1 Specifications (Largest motor: 25HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	39	3	50	FRN60	100	08 / 10.00
52	208	39	3	60	FRN50	100	08 / 10.00
62	220	38	3	50	FRN50	90	08 / 10.00
66	220	38	3	60	FRN50	90	08 / 10.00
74	240	35	3	60	FRN45	80	08 / 10.00
81	346	24	3	50	FRS30	60	10 / 6.00
82	380	23	3	50	FRS30	60	10 / 6.00
83	380	23	3	60	FRS30	60	10 / 6.00
84	400	23	3	50	FRS30	50	10 / 6.00
85	415	22	3	50	FRS25	50	10 / 6.00
88	440	22	3	50	FRS25	45	10 / 6.00
94	440	22	3	60	FRS25	45	10 / 6.00
96	480	20	3	60	FRS25	40	12 / 4.00
98	600	16	3	60	FRS20	35	12 / 4.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

42044SP2, WP2, SR2, WR2 (Single Motor)

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors 48032 BHP, BTL, BTN 48036 QHP, QTL, QTN, J6L, J6N, J6P 48036 D6A, D6L, D6N, P6A, P6L, P6N

Table 1: Specifications (Largest motor: 10 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	32	3	50	FRN70	125	08 / 10.00
52	208	31	3	60	FRN70	125	08 / 10.00
62	220	29	3	50	FRN60	125	08 / 10.00
66	220	29	3	60	FRN60	125	08 / 10.00
74	240	26	3	60	FRN60	100	08 / 10.00
81	346	18.5	3	50	FRS40	70	10 / 6.00
82	380	17	3	50	FRS35	70	10 / 6.00
83	380	17	3	60	FRS35	70	10 / 6.00
84	400	16	3	50	FRS35	70	10 / 6.00
85	415	15.5	3	50	FRS35	60	10 / 6.00
88	440	14.5	3	50	FRS30	60	10 / 6.00
94	440	14.5	3	60	FRS30	60	10 / 6.00
96	480	13.5	3	60	FRS30	50	10 / 6.00
98	600	11	3	60	FRS25	45	12 / 4.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFHOUF01 —

External Fuse or Breaker and Wire Sizes for Washer-extractors

48040F7J, F7B, F7N, F7W, H7N, H7W, F7D, M7K; MWF125C7, MWF125J7, MWF125Y7, MWF125Z7

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Table 1. Specifications (Largest motor: 25HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	63	3	50	FRN75	75	04 / 25.00
52	208	62	3	60	FRN75	75	04 / 25.00
62	220	60	3	50	FRN75	75	04 / 25.00
66	220	60	3	60	FRN75	75	04 / 25.00
74	240	59	3	60	FRN75	75	04 / 25.00
81	346	34	3	50	FRS50	50	8 / 10.00
82	380	33	3	50	FRS50	50	8 / 10.00
83	380	33	3	60	FRS50	50	8 / 10.00
84	400	33	3	50	FRS50	50	8 / 10.00
85	415	33	3	50	FRS50	50	8 / 10.00
88	440	32	3	50	FRS50	50	8 / 10.00
94	440	32	3	60	FRS50	50	8 / 10.00
96	480	32	3	60	FRS50	50	8 / 10.00
99	600 to 480	32	3	60	FRS50	50	8 / 10.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

48040F7J, F7B, F7N, F7W, H7N, H7W, F7D, M7K; MWF125C7, MWF125J7, MWF125Y7, MWF125Z7

CAUTION: Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors 52038 WP1, WTL, WTN 72058 J2N

Table 1: Specifications (Largest motor: 15 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	48	3	50	FRN100	200	06 / 16.00
52	208	46.5	3	60	FRN100	200	06 / 16.00
62	220	44	3	50	FRN90	175	06 / 16.00
66	220	44	3	60	FRN90	175	06 / 16.00
74	240	40	3	60	FRN90	175	06 / 16.00
81	346	28	3	50	FRS60	110	08 / 10.00
82	380	25.5	3	50	FRS60	100	08 / 10.00
83	380	24	3	60	FRS60	100	08 / 10.00
84	400	24	3	50	FRS50	100	08 / 10.00
85	415	23	3	50	FRS50	90	10 / 6.00
88	440	22	3	50	FRS45	90	10 / 6.00
94	440	22	3	60	FRS45	90	10 / 6.00
96	480	20	3	60	FRS45	80	10 / 6.00
98	600	16	3	60	FRS35	70	10 / 6.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFHOWF01 —

External Fuse or Breaker and Wire Sizes for Washer-extractors

60044 SP2/SP3, WP2/WP3 (Multi- and Single motor); 60044SR2/SR3, WR2/WR3; 64040 E6N; 64042 BHP, BTL/BTN, D6A/D6L/D6N; 64046 D6N, E6N, J6N, T6N; 64050 E6N; 72044 D6A/D6L/D6N, SP2/SP3, WP1/WP2/WP3, WTL/WTN; 72046 D5N, E5N, J5N, T5N

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Table 1. Specifications (Largest motor:)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	62	3	50	FRN110	225	04 / 25.00
52	208	60	3	60	FRN110	200	04 / 25.00
62	220	56.5	3	50	FRN100	200	04 / 25.00
66	220	56.5	3	60	FRN100	200	04 / 25.00
74	240	51.5	3	60	FRN100	200	04 / 25.00
81	346	36	3	50	FRS70	125	08 / 10.00
82	380	33	3	50	FRS60	125	08 / 10.00
83	380	33	3	60	FRS60	125	08 / 10.00
84	400	31	3	50	FRS60	125	08 / 10.00
85	415	30	3	50	FRS60	100	08 / 10.00
88	440	28	3	50	FRS50	100	08 / 10.00
94	440	28	3	60	FRS50	100	08 / 10.00
96	480	26	3	60	FRS50	90	08 / 10.00
98	600	21	3	60	FRS40	70	08 / 10.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

60044 SP2/SP3, WP2/WP3 (Multi- and Single motor); 60044SR2/SR3, WR2/WR3; 64040 E6N; 64042 BHP, BTL/BTN, D6A/D6L/D6N; 64046 D6N, E6N, J6N, T6N; 64050 E6N; 72044 D6A/D6L/D6N, SP2/SP3, WP1/WP2/WP3, WTL/WTN; 72046 D5N, E5N, J5N, T5N

CAUTION: Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

68036F5N, H5N, M5K

BGWHTF01.R01 0000165572 B.2 11/10/23, 8:40 AM Released

Table 1. Specifications (Largest motor: 40HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	62	3	50	FRN110	225	02 / 35.00
52	208	60	3	60	FRN110	200	02 / 35.00
62	220	56.5	3	50	FRN100	200	03 / 25.00
66	220	56.5	3	60	FRN100	200	03 / 25.00
74	240	51.5	3	60	FRN100	200	03 / 25.00
81	346	36	3	50	FRS70	125	06 / 16.00
82	380	33	3	50	FRS60	125	06 / 16.00
83	380	33	3	60	FRS60	125	06 / 16.00
84	400	31	3	50	FRS60	125	06 / 16.00
85	415	30	3	50	FRS60	100	06 / 16.00
88	440	28	3	50	FRS50	100	08 / 10.00
94	440	28	3	60	FRS50	100	08 / 10.00
96	480	26	3	60	FRS50	90	08 / 10.00
98	600	21	3	60	FRS40	70	08 / 10.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

68036F5N, H5N, M5K

CAUTION: Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors

72046M5K

BGWHTF02.R01 0000165570 B.2 7/14/22, 11:29 AM Released

Table 1. Specifications (Largest motor: 75HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	116	3	50	FRN225	375	000 / 95.00
52	208	112	3	60	FRN225	375	000 / 95.00
62	220	105	3	50	FRN200	375	000 / 95.00
66	220	105	3	60	FRN200	325	000 / 95.00
74	240	95	3	60	FRN200	325	000 / 95.00
81	346	66	3	50	FRS140	225	01 / 50.00
82	380	60	3	50	FRS120	225	01 / 50.00
83	380	60	3	60	FRS120	225	01 / 50.00
84	400	58	3	50	FRS120	225	01 / 50.00
85	415	57	3	50	FRS120	225	01 / 50.00
88	440	55	3	50	FRS100	200	02 / 35.00
94	440	55	3	60	FRS100	200	02 / 35.00
96	480	50	3	60	FRS100	200	02 / 35.00
98	600	40	3	60	FRS80	175	04 / 25.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Washer-extractors

72046M5K

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Washer-extractors 72058J2N, 72075J2N

Table 1: Specifications (Largest motor: 15 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	48	3	50	FRN100	100	06 / 16.00
52	208	46.5	3	60	FRN100	100	06 / 16.00
62	220	44	3	50	FRN90	90	06 / 16.00
66	220	44	3	60	FRN90	90	06 / 16.00
74	240	40	3	60	FRN90	90	06 / 16.00
81	346	28	3	50	FRS60	60	08 / 10.00
82	380	25.5	3	50	FRS60	60	08 / 10.00
83	380	24	3	60	FRS60	60	08 / 10.00
84	400	24	3	50	FRS50	50	08 / 10.00
85	415	23	3	50	FRS50	50	10 / 6.00
88	440	22	3	50	FRS45	45	10 / 6.00
94	440	22	3	60	FRS45	45	10 / 6.00
96	480	20	3	60	FRS45	45	10 / 6.00
98	600	16	3	60	FRS35	35	10 / 6.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFIEGF01 —

External Fuse or Breaker and Wire Sizes for Washer-extractors 72058 J5N

Table 1: Specifications (Largest motor: 30 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	92	3	50	FRN200	375	2 / 35.00
52	208	89	3	60	FRN200	350	2 / 35.00
62	220	84	3	50	FRN200	350	3 / 35.00
66	220	84	3	60	FRN200	350	3 / 35.00
74	240	77	3	60	FRN175	300	3 / 35.00
81	346	53	3	50	FRS125	200	6 / 16.00
82	380	49	3	50	FRS110	200	6 / 16.00
83	380	49	3	60	FRS110	200	6 / 16.00
84	400	46	3	50	FRS110	200	6 / 16.00
85	415	45	3	50	FRS110	200	6 / 16.00
88	440	42	3	50	FRS100	175	8 / 10.00
94	440	42	3	60	FRS100	175	8 / 10.00
96	480	39	3	60	FRS90	150	8 / 10.00
98	600	31	3	60	FRS70	125	10 / 6.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFIEGF02 —

Continuous Batch Washers

2

External Fuse or Breaker and Wire Sizes for Continuous Batch Washers with THREE Horsepower Motors

76032 CBW

BGT1AF01.R01 0000166375 A.6 12/4/17 3:45 PM Released

Table 1 Specifications

Number of Modules ↓	Specification	See notes ↓	Specified values for the voltage (VAC) shown (See note 1)										
			200 VAC	208 VAC	220 VAC	240 VAC	346 VAC	380 VAC	400 VAC	415 VAC	440 VAC	480 VAC	600 VAC
3	Fuse/Breaker (Amps)	3, 5	KTN70	KTN70	KTN70	KTN60	KTS50	KTS40	KTS40	KTS40	KTS40	KTS30	KTS25
	Wire (AWG/mm²)	4, 5	4 (25)	4 (25)	4 (25)	4 (25)	6 (16)	8 (10)	8 (10)	8 (10)	8 (10)	8 (10)	10 (6)
	Running Amps	2	64	61	58	54	38	34	31	31	29	26	21
4	Fuse/Breaker (Amps)	3, 5	KTN80	KTN80	KTN80	KTN70	KTS50	KTS50	KTS40	KTS40	KTS40	KTS40	KTS30
	Wire (AWG/mm²)	4, 5	3 (35)	3 (35)	3 (35)	4 (25)	6 (16)	6 (16)	6 (16)	6 (16)	8 (10)	8 (10)	8 (10)
	Running Amps	2	75	72	68	63	44	40	37	36	34	31	25
5	Fuse/Breaker (Amps)	3, 5	KTN100	KTN100	KTN90	KTN90	KTS60	KTS60	KTS50	KTS50	KTS50	KTS50	KTS40
	Wire (AWG/mm²)	4, 5	3 (35)	3 (35)	3 (35)	3 (35)	6 (16)	6 (16)	6 (16)	6 (16)	6 (16)	8 (10)	8 (10)
	Running Amps	2	86	83	78	72	50	46	43	41	39	36	29
6	Fuse/Breaker (Amps)	3, 5	KTN125	KTN110	KTN100	KTN100	KTS70	KTS60	KTS60	KTS60	KTS50	KTS50	KTS40
	Wire (AWG/mm²)	4, 5	1 (50)	1 (50)	1 (50)	2 (35)	4 (25)	4 (25)	4 (25)	4 (25)	6 (16)	6 (16)	8 (10)
	Running Amps	2	97	94	88	81	56	52	49	46	44	41	33
7	Fuse/Breaker (Amps)	3, 5	KTN125	KTN125	KTN125	KTN110	KTS70	KTS70	KTS70	KTS60	KTS60	KTS60	KTS50
	Wire (AWG/mm²)	4, 5	0 (70)	0 (70)	1 (50)	1 (50)	4 (25)	4 (25)	4 (25)	4 (25)	4 (25)	4 (25)	6 (16)
	Running Amps	2	108	105	98	90	62	58	55	51	49	46	37
8	Fuse/Breaker (Amps)	3, 5	KTN150	KTN150	KTN125	KTN110	KTS80	KTS70	KTS70	KTS70	KTS60	KTS60	KTS50
	Wire (AWG/mm²)	4, 5	0 (70)	0 (70)	0 (70)	1 (50)	3 (35)	3 (35)	4 (25)	4 (25)	4 (25)	4 (25)	6 (16)
	Running Amps	2	119	116	108	99	68	64	61	56	54	51	41
9	Fuse/Breaker (Amps)	3, 5	KTN150	KTN150	KTN150	KTN125	KTS90	KTS80	KTS80	KTS70	KTS70	KTS70	KTS50
	Wire (AWG/mm²)	4, 5	0 (70)	0 (70)	0 (70)	0 (70)	3 (35)	3 (35)	3 (35)	3 (35)	4 (25)	4 (25)	4 (25)
	Running Amps	2	130	127	118	108	74	70	67	61	59	56	45
10	Fuse/Breaker (Amps)	3, 5	KTN175	KTN175	KTN150	KTN150	KTS90	KTS90	KTS80	KTS80	KTS70	KTS70	KTS70
	Wire (AWG/mm²)	4, 5	00 (70)	00 (70)	0 (70)	0 (70)	3 (35)	3 (35)	3 (35)	3 (35)	3 (35)	4 (25)	4 (25)
	Running Amps	2	141	138	128	117	80	76	73	66	64	61	49
11	Fuse/Breaker (Amps)	3, 5	KTN175	KTN175	KTN150	KTN150	KTS100	KTS90	KTS90	KTS80	KTS80	KTS80	KTS60
	Wire (AWG/mm²)	4, 5	00 (70)	00 (70)	00 (70)	00 (70)	3 (35)	3 (35)	3 (35)	3 (35)	3 (35)	3 (35)	4 (25)
	Running Amps	2	152	149	138	126	86	82	79	71	69	66	53
12	Fuse/Breaker (Amps)	3, 5	KTN175	KTN175	KTN175	KTN150	KTS100	KTS100	KTS100	KTS90	KTS90	KTS80	KTS70
	Wire (AWG/mm²)	4, 5	000 (95)	000 (95)	000 (95)	00 (70)	2 (35)	2 (35)	2 (35)	3 (35)	3 (35)	3 (35)	4 (25)
	Running Amps	2	163	160	148	135	92	88	85	76	74	71	57
13	Fuse/Breaker (Amps)	3, 5	KTN200	KTN200	KTN175	KTN175	KTS110	KTS110	KTS100	KTS90	KTS90	KTS90	KTS70
	Wire (AWG/mm²)	4, 5	000 (95)	000 (95)	000 (95)	00 (70)	2 (35)	2 (35)	2 (35)	2 (35)	3 (35)	3 (35)	4 (25)
	Running Amps	2	174	171	158	144	98	94	91	81	79	76	61

External Fuse or Breaker and Wire Sizes for Continuous Batch Washers with THREE Horsepower Motors

76032 CBW

1 Specifications (cont'd.)

Number of Modules ↓	Specification	See notes ↓	Specified values for the voltage (VAC) shown (See note 1)										
			200 VAC	208 VAC	220 VAC	240 VAC	346 VAC	380 VAC	400 VAC	415 VAC	440 VAC	480 VAC	600 VAC
14	Fuse/Breaker (Amps)	3, 5	KTN200	KTN200	KTN200	KTN175	KTS125	KTS110	KTS110	KTS100	KTS90	KTS90	KTS70
	Wire (AWG/mm²)	4, 5	000 (95)	000 (95)	000 (95)	000 (95)	1 (50)	1 (50)	1 (50)	2 (35)	2 (35)	3 (35)	4 (25)
	Running Amps	2	185	182	168	153	104	100	97	86	84	81	65
15	Fuse/Breaker (Amps)	3, 5	KTN225	KTN225	KTN200	KTN175	KTS125	KTS125	KTS110	KTS100	KTS100	KTS100	KTS80
	Wire (AWG/mm²)	4, 5	0000 (120)	0000 (120)	0000 (120)	000 (95)	1 (50)	1 (50)	1 (50)	1 (50)	2 (35)	2 (35)	3 (35)
	Running Amps	2	196	193	178	162	110	106	103	91	89	86	69
16	Fuse/Breaker (Amps)	3, 5	KTN225	KTN225	KTN200	KTN200	KTS125	KTS125	KTS125	KTS110	KTS100	KTS100	KTS80
	Wire (AWG/mm²)	4, 5	0000 (120)	0000 (120)	0000 (120)	000 (95)	0 (70)	0 (70)	1 (50)	1 (50)	1 (50)	2 (35)	3 (35)
	Running Amps	2	207	204	188	171	116	112	109	96	94	91	74
17	Fuse/Breaker (Amps)	3, 5	KTN225	KTN225	KTN225	KTN200	KTS150	KTS125	KTS125	KTS110	KTS110	KTS100	KTS90
	Wire (AWG/mm²)	4, 5	300MCM (185)	300MCM (185)	250MCM (150)	0000 (120)	00 (70)	0 (70)	0 (70)	1 (50)	1 (50)	1 (50)	3 (35)
	Running Amps	2	218	215	198	180	122	118	115	101	99	96	79
18	Fuse/Breaker (Amps)	3, 5	KTN250	KTN250	KTN225	KTN200	KTS150	KTS150	KTS125	KTS110	KTS110	KTS110	KTS90
	Wire (AWG/mm²)	4, 5	300MCM (185)	300MCM (185)	300MCM (185)	250MCM (150)	00 (70)	00 (70)	00 (70)	0 (70)	0 (70)	1 (50)	2 (35)
	Running Amps	2	229	226	208	190	128	124	121	106	104	101	84
19	Fuse/Breaker (Amps)	3, 5	KTN250	KTN250	KTN225	KTN225	KTS150	KTS150	KTS150	KTS125	KTS125	KTS110	KTS100
	Wire (AWG/mm²)	4, 5	300MCM (185)	300MCM (185)	300MCM (185)	250MCM (150)	00 (70)	00 (70)	00 (70)	0 (70)	0 (70)	0 (70)	2 (35)
	Running Amps	2	240	237	218	200	134	130	127	111	109	106	89
20	Fuse/Breaker (Amps)	3, 5	KTN275	KTN275	KTN250	KTN225	KTS150	KTS150	KTS150	KTS125	KTS125	KTS125	KTS100
	Wire (AWG/mm²)	4, 5	350MCM (185)	350MCM (185)	300MCM (185)	250MCM (150)	00 (70)	00 (70)	00 (70)	0 (70)	0 (70)	0 (70)	2 (35)
	Running Amps	2	251	248	228	210	140	136	133	116	114	111	94

Notes

1. Running amps, fuse size and wire size for a given voltage are the same, regardless of frequency (50 Hz or 60 Hz).
2. The **calculated** running amps shown in the table are with all motors fully loaded and up to speed plus 3 KVA of control power. The motors include all drive motors plus up to seven, 2.0 horsepower motors (six pumps and a loading conveyor). In actuality, neither the motors nor control power are fully loaded. Hence, the **measured** running amps will be 20% to 30% less.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type and match the amperage rating in the “Fuse/Breaker (Amps)” row. If standard circuit breakers are used, they must match the

External Fuse or Breaker and Wire Sizes for Continuous Batch Washers with THREE Horsepower Motors

76032 CBW

amperage rating listed in the “Running Amps” row. If inverse time circuit breakers are used, they must match the amperage rating listed in the “Fuse/Breaker (Amps)” row. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.

4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Welded Continuous Batch Washers with TEN Horsepower per Welded Group

76028 and 76039 CBW

BGT32F01.R01 0000168858 A.3 12/5/17 10:51 AM Released

Table 1 Specifications

Number of Modules ↓	Specification	See notes ↓	Specified values for the voltage (VAC) shown (See note 1)										
			200 VAC	208 VAC	220 VAC	240 VAC	346 VAC	380 VAC	400 VAC	415 VAC	440 VAC	480 VAC	600 VAC
1	Fuse (Amps)	3, 5	KTN90	KTN90	KTN90	KTN75	KTS60	KTS50	KTS50	KTS50	KTS50	KTS40	KTS30
	Breaker (Amps)	3, 5	110	100	100	90	60	60	60	50	50	50	40
	Wire (AWG/mm²)	4, 5, 6	6 (16)	6 (16)	6 (16)	6 (16)	8 (10)	8 (10)	8 (10)	8 (10)	8 (10)	8 (10)	8 (10)
	Running Amps	2	68	66	62	57	40	36	34	33	31	28	23
2	Fuse (Amps)	3, 5	KTN125	KTN125	KTN125	KTN110	KTS80	KTS70	KTS70	KTS70	KTS60	KTS60	KTS50
	Breaker (Amps)	3, 5	150	150	150	125	80	80	70	70	70	60	50
	Wire (AWG/mm²)	4, 5, 6	2 (35)	3 (35)	3 (35)	4 (25)	6 (16)	6 (16)	6 (16)	8 (10)	8 (10)	8 (10)	10 (6)
	Running Amps	2	103	99	94	86	60	54	52	50	47	43	34
3	Fuse (Amps)	3, 5	KTN175	KTN175	KTN150	KTN150	KTS100	KTS90	KTS90	KTS80	KTS80	KTS80	KTS60
	Breaker (Amps)	3, 5	175	175	175	150	100	100	90	90	80	80	60
	Wire (AWG/mm²)	4, 5, 6	0 (70)	0 (70)	1 (50)	1 (50)	4 (25)	4 (25)	4 (25)	4 (25)	6 (16)	6 (16)	8 (10)
	Running Amps	2	140	134	126	116	80	73	70	67	63	58	47
4	Fuse (Amps)	3, 5	KTN200	KTN200	KTN175	KTN175	KTS110	KTS100	KTS100	KTS100	KTS90	KTS80	KTS70
	Breaker (Amps)	3, 5	225	200	200	175	125	110	110	100	100	90	70
	Wire (AWG/mm²)	4, 5, 6	000 (95)	00 (70)	00 (70)	0 (70)	2 (35)	3 (35)	3 (35)	3 (35)	4 (25)	4 (25)	6 (16)
	Running Amps	2	168	161	152	140	97	88	84	81	76	70	56

Notes

1. Running amps, fuse size and wire size for a given voltage are the same, regardless of frequency (50 Hz or 60 Hz).
2. The **calculated** running amps shown in the table are with all motors fully loaded and up to speed plus 3 KVA of control power. The motors include all drive motors plus up to seven, 2.0 horsepower motors (six pumps and a loading conveyor). In actuality, neither the motors nor control power are fully loaded. Hence, the **measured** running amps will be 20% to 30% less.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type and match the amperage rating in the “Fuse/Breaker (Amps)” row. If standard circuit breakers are used, they must match the amperage rating listed in the “Running Amps” row. If inverse time circuit breakers are used, they must match the amperage rating listed in the “Fuse/Breaker (Amps)” row. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Welded Continuous Batch Washers with TEN Horsepower per Welded Group

76028 and 76039 CBW

6. The drive motors on this machine are inverter-driven. The wire size for the wiring between the inverter and each motor (normally factory-supplied) is per the US National Electric Code, section 430-28, which states: “Feeder tap conductors shall have an ampacity not less than that required by Part B, shall terminate in a branch-circuit protective device and, in addition, shall have an ampacity of at least one-third that of the feeder conductors, be protected from physical damage and be not more than 25 feet (7.62m) in length.” The following table shows the feeder tap wire size used by Milnor for a given feeder conductor (main feeder) wire size:

Table 2 Feeder Tap Wire Sizes

	Feeder Conductor	Feeder Tap
Wire (AWG/mm²)	0000 / 120	4 / 25
	000 / 95	4 / 25
	00 / 70	6 / 16
	0 / 70	8 / 10
	1 / 50	8 / 10
	2 / 35	8 / 10
	3 / 35	8 / 10
	4 / 25	8 / 10

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Welded Continuous Batch Washers with TEN Horsepower per Welded Group

76028 and 76039 PulseFlow® CBW

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Table 1. Specifications

Number of Modules ↓	Specification	See notes ↓	Specified values for the voltage (VAC) shown (See note 1)										
			200 VAC	208 VAC	220 VAC	240 VAC	346 VAC	380 VAC	400 VAC	415 VAC	440 VAC	480 VAC	600 VAC
1	Fuse (Amps)	3, 5	KTN100	KTN100	KTN90	KTN90	KTS60	KTS60	KTS50	KTS50	KTS50	KTS50	KTS40
	Breaker (Amps)	3, 5	110	100	100	90	60	60	60	50	50	50	40
	Wire (AWG/mm²)	4, 5, 6	6 (16)	6 (16)	6 (16)	6 (16)	8 (10)	8 (10)	8 (10)	8 (10)	8 (10)	8 (10)	8 (10)
	Running Amps	2	90	87	78	71	48	44	42	41	38	35	28
2	Fuse (Amps)	3, 5	KTN150	KTN150	KTN150	KTN125	KTS90	KTS80	KTS80	KTS80	KTS80	KTS80	KTS70
	Breaker (Amps)	3, 5	150	150	150	125	90	80	80	80	80	80	70
	Wire (AWG/mm²)	4, 5, 6	2 (35)	2 (35)	3 (35)	3 (35)	4 (35)	4 (35)	4 (35)	4 (35)	4 (35)	4 (35)	8 (10)
	Running Amps	2	125	120	110	100	72	66	65	63	60	55	40
3	Fuse (Amps)	3, 5	KTN225	KTN200	KTN200	KTN175	KTS150	KTS125	KTS125	KTS125	KTS100	KTS100	KTS80
	Breaker (Amps)	3, 5	225	200	200	175	150	125	125	125	100	100	80
	Wire (AWG/mm²)	4, 5, 6	000 (95)	00 (70)	00 (50)	0 (50)	2 (35)	2 (35)	2 (35)	3 (35)	3 (35)	4 (25)	6 (16)
	Running Amps	2	188	184	172	158	116	106	97	92	88	79	64

Notes

1. Running amps, fuse size and wire size for a given voltage are the same, regardless of frequency (50 Hz or 60 Hz).
2. The **calculated** running amps shown in the table are with all motors fully loaded and up to speed plus 3 KVA of control power. For the one and two section, the motors include all drive motors plus one 2.0 horsepower motor, one 5.0 horsepower motor, one 4.0 horsepower motor, one 7.5 horsepower motor, and one 3.0 horsepower motor. For the third and fourth section, there is an additional 7.5 horsepower pump. In actuality, neither the motors nor control power are fully loaded. Hence, the **measured** running amps will be 20% to 30% less.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type and match the amperage rating in the “Fuse/Breaker (Amps)” row. If standard circuit breakers are used, they must match the amperage rating listed in the “Running Amps” row. If inverse time circuit breakers are used, they must match the amperage rating listed in the “Fuse/Breaker (Amps)” row. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Welded Continuous Batch Washers with TEN Horsepower per Welded Group

76028 and 76039 PulseFlow® CBW

6. The drive motors on this machine are inverter-driven. The wire size for the wiring between the inverter and each motor (normally factory-supplied) is per the US National Electric Code, section 430-28, which states: “Feeder tap conductors shall have an ampacity not less than that required by Part B, shall terminate in a branch-circuit protective device and, in addition, shall have an ampacity of at least one-third that of the feeder conductors, be protected from physical damage and be not more than 25 feet (7.62m) in length.” The following table shows the feeder tap wire size used by Milnor for a given feeder conductor (main feeder) wire size:

Table 2. Feeder Tap Wire Sizes

	Feeder Conductor	Feeder Tap
Wire (AWG/mm²)	0000 / 120	4 / 25
	000 / 95	4 / 25
	00 / 70	6 / 16
	0 / 70	8 / 10
	1 / 50	8 / 10
	2 / 35	8 / 10
	3 / 35	8 / 10
	4 / 25	8 / 10

CAUTION: Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Welded Continuous Batch Washers with TEN Horsepower per Welded Group

76028 and 76039 PulseFlow® CBW (Plus Alternate PulseFlow®)

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Table 1. Specifications

Number of Modules ↓	Specification	See notes ↓	Specified values for the voltage (VAC) shown (See note 1)										
			200 VAC	208 VAC	220 VAC	240 VAC	346 VAC	380 VAC	400 VAC	415 VAC	440 VAC	480 VAC	600 VAC
1	Fuse (Amps)	3, 5							KTS70			KTS60	
	Breaker (Amps)	3, 5							70			60	
	Wire (AWG/mm²)	4, 5, 6							4 (25)			6 (10)	
	Running Amps	2							58			48	
2	Fuse (Amps)	3, 5		KTN175				KTS100				KTS80	
	Breaker (Amps)	3, 5		175				100				80	
	Wire (AWG/mm²)	4, 5, 6		1/0 (54)				3 (35)				4 (25)	
	Running Amps	2		140				82				65	
3	Fuse (Amps)	3, 5										KTS110	
	Breaker (Amps)	3, 5										110	
	Wire (AWG/mm²)	4, 5, 6										2 (35)	
	Running Amps	2										89	

Notes

1. Running amps, fuse size and wire size for a given voltage are the same, regardless of frequency (50 Hz or 60 Hz).
2. The **calculated** running amps shown in the table are with all motors fully loaded and up to speed plus 3 KVA of control power. For the one and two section, the motors include all drive motors plus one 2.0 horsepower motor, two 5.0 horsepower motors, one 4.0 horsepower motor, one 7.5 horsepower motor, and one 3.0 horsepower motor. For the third and fourth section, there is an additional 7.5 horsepower pump. In actuality, neither the motors nor control power are fully loaded. Hence, the **measured** running amps will be 20% to 30% less.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type and match the amperage rating in the “Fuse/Breaker (Amps)” row. If standard circuit breakers are used, they must match the amperage rating listed in the “Running Amps” row. If inverse time circuit breakers are used, they must match the amperage rating listed in the “Fuse/Breaker (Amps)” row. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.
6. The drive motors on this machine are inverter-driven. The wire size for the wiring between the inverter and each motor (normally factory-supplied) is per the US National Electric Code, section 430-28, which states: “Feeder tap conductors shall have an ampacity not less than that required by Part B,

External Fuse or Breaker and Wire Sizes for Welded Continuous Batch Washers with TEN Horsepower per Welded Group

76028 and 76039 PulseFlow® CBW (Plus Alternate PulseFlow®)

shall terminate in a branch-circuit protective device and, in addition, shall have an ampacity of at least one-third that of the feeder conductors, be protected from physical damage and be not more than 25 feet (7.62m) in length." The following table shows the feeder tap wire size used by Milnor for a given feeder conductor (main feeder) wire size:

Table 2. Feeder Tap Wire Sizes

	Feeder Conductor	Feeder Tap
Wire (AWG/mm²)	0000 / 120	4 / 25
	000 / 95	4 / 25
	00 / 70	6 / 16
	0 / 70	8 / 10
	1 / 50	8 / 10
	2 / 35	8 / 10
	3 / 35	8 / 10
	4 / 25	8 / 10

CAUTION: **Fire hazard** — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Welded Continuous Batch Washers with TEN Horsepower per Welded Group

76028 and 76039 PulseFlow® 2 CBW with and without Shaker

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Table 1. Specifications

Number of Modules ↓	Specification	See notes ↓	Specified values for the voltage (VAC) shown (See note 1)										
			200 VAC	208 VAC	220 VAC	240 VAC	346 VAC	380 VAC	400 VAC	415 VAC	440 VAC	480 VAC	600 VAC
2	Fuse (Amps)	3, 5				KTN160			KTS100	KTS90	KTS90	KTS80	KTS70
	Breaker (Amps)	3, 5				160			125	90	90	80	80
	Wire (AWG/mm²)	4, 5, 6				0 (70)			2 (35)	4 (35)	4 (35)	4 (25)	6 (16)
	Running Amps	2				130			80	75	70	65	51
3	Fuse (Amps)	3, 5			KTN225			KTS150	KTS150	KTS125	KTS125	KTS125	KTS90
	Breaker (Amps)	3, 5			KTN225			150	150	125	125	125	90
	Wire (AWG/mm²)	4, 5, 6			3 / 0			1 (50)	1 (50)	2 (35)	2 (35)	2 (35)	4 (35)
	Running Amps	2			175			120	120	108	102	92	73

Notes

1. Running amps, fuse size and wire size for a given voltage are the same, regardless of frequency (50 Hz or 60 Hz).
2. The **calculated** running amps shown in the table are with all motors fully loaded and up to speed plus 3 KVA of control power. For the one and two section, the motors include all drive motors plus one 2.0 horsepower motor, one 5.0 horsepower motor, one 4.0 horsepower motor, two 7.5 horsepower motors, and one 3.0 horsepower motor. For the third and fourth section, there is an additional 7.5 horsepower pump. In actuality, neither the motors not control power are fully loaded. **Hence**, the measured running amps will be 20% to 30% less.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type and match the amperage rating in the “Fuse/Breaker (Amps)” row. If standard circuit breakers are used, they must match the amperage rating listed in the “Running Amps” row. If inverse time circuit breakers are used, they must match the amperage rating listed in the “Fuse/Breaker (Amps)” row. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.
6. The drive motors on this machine are inverter-driven. The wire size for the wiring between the inverter and each motor (normally factory-supplied) is per the US National Electric Code, section 430-28, which states: “Feeder tap conductors shall have an ampacity not less than that required by Part B, shall terminate in a branch-circuit protective device and, in addition, shall have an ampacity of at least one-third that of the feeder conductors, be protected from physical damage and be not more than

External Fuse or Breaker and Wire Sizes for Welded Continuous Batch Washers with TEN Horsepower per Welded Group

76028 and 76039 PulseFlow® 2 CBW with and without Shaker

25 feet (7.62m) in length." The following table shows the feeder tap wire size used by Milnor for a given feeder conductor (main feeder) wire size:

Table 2. Feeder Tap Wire Sizes

	Feeder Conductor	Feeder Tap
Wire (AWG/mm²)	0000 / 120	4 / 25
	000 / 95	4 / 25
	00 / 70	6 / 16
	0 / 70	8 / 10
	1 / 50	8 / 10
	2 / 35	8 / 10
	3 / 35	8 / 10
	4 / 25	8 / 10

CAUTION: Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Welded Continuous Batch Washers with TEN Horsepower per Welded Group

76028 and 76039 PulseFlow® 2 CBW (Plus Alternate PulseFlow®) with and without Shaker

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Table 1. Specifications

Number of Modules ↓	Specification	See notes ↓	Specified values for the voltage (VAC) shown (See note 1)										
			200 VAC	208 VAC	220 VAC	240 VAC	346 VAC	380 VAC	400 VAC	415 VAC	440 VAC	480 VAC	600 VAC
2	Fuse (Amps)	3, 5								KTS100	KTS90	KTS90	KTS70
	Breaker (Amps)	3, 5								100	90	90	70
	Wire (AWG/mm²)	4, 5, 6								3 (35)	3 (35)	4 (35)	6 (16)
	Running Amps	2								84	80	72	58
3	Fuse (Amps)	3, 5	KTN300							KTS150	KTS125	KTS125	KTS90
	Breaker (Amps)	3, 5	300							150	125	125	90
	Wire (AWG/mm²)	4, 5, 6	300 (150)							1 (50)	2 (50)	3 (50)	4 (35)
	Running Amps	2	265							113	107	97	77
4	Fuse (Amps)	3, 5										KTS150	
	Breaker (Amps)	3, 5										150	
	Wire (AWG/mm²)	4, 5, 6										1 (50)	
	Running Amps	2										110	

Notes

1. Running amps, fuse size and wire size for a given voltage are the same, regardless of frequency (50 Hz or 60 Hz).
2. The **calculated** running amps shown in the table are with all motors fully loaded and up to speed plus 3 KVA of control power. For the one and two section, the motors include all drive motors plus one 2.0 horsepower, one 5.0 horsepower motor, one 4.0 horsepower motor, three 7.5 horsepower motors, and one 3.0 horsepower motor. For the third and fourth section, there is an additional 7.5 horsepower pump. In actuality, neither the motors nor control power are fully loaded. Hence, the **measured** running amps will be 20% less and 30% less.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type and match the amperage rating in the “Fuse/Breaker (Amps)” row. If standard circuit breakers are used, they must match the amperage rating listed in the “Running Amps” row. If inverse time circuit breakers are used, they must match the amperage rating listed in the “Fuse/Breaker (Amps)” row. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.
6. The drive motors on this machine are inverter-driven. The wire size for the wiring between the inverter and each motor (normally factory-supplied) is per the US National Electric Code, section 430-28,

External Fuse or Breaker and Wire Sizes for Welded Continuous Batch Washers with TEN Horsepower per Welded Group

76028 and 76039 PulseFlow® 2 CBW (Plus Alternate PulseFlow®) with and without Shaker

which states: “Feeder tap conductors shall have an ampacity not less than that required by Part B, shall terminate in a branch-circuit protective device and, in addition, shall have an ampacity of at least one-third that of the feeder conductors, be protected from physical damage and be not more than 25 feet (7.62m) in length.” The following table shows the feeder tap wire size used by Milnor for a given feeder conductor (main feeder) wire size:

Table 2. Feeder Tap Wire Sizes

	Feeder Conductor	Feeder Tap
Wire (AWG/mm²)	0000 / 120	4 / 25
	000 / 95	4 / 25
	00 / 70	6 / 16
	0 / 70	8 / 10
	1 / 50	8 / 10
	2 / 35	8 / 10
	3 / 35	8 / 10
	4 / 25	8 / 10

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Welded Continuous Batch Washers with TEN Horsepower per Welded Group

76028 and 76039 PulseFlow®2 CBW (steamless)

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Table 1. Specifications

Number of Modules ↓	Specification	See notes ↓	Specified values for the voltage (VAC) shown (See note 1)										
			200 VAC	208 VAC	220 VAC	240 VAC	346 VAC	380 VAC	400 VAC	415 VAC	440 VAC	480 VAC	600 VAC
2	Fuse (Amps)	3, 5											
	Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5, 6											
	Running Amps	2											
3	Fuse (Amps)	3, 5										KTS150	
	Breaker (Amps)	3, 5										150	
	Wire (AWG/mm²)	4, 5, 6										1 (50)	
	Running Amps	2										117	
4	Fuse (Amps)	3, 5											
	Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5, 6											
	Running Amps	2											

Notes

1. Running amps, fuse size and wire size for a given voltage are the same, regardless of frequency (50 Hz or 60 Hz).
2. The **calculated** running amps shown in the table are with all motors fully loaded and up to speed plus 3 KVA of control power. For the one and two section, the motors include all drive motors plus one 2.0 horsepower, one 5.0 horsepower motor, one 4.0 horsepower motor, four 7.5 horsepower motors, and one 3.0 horsepower motor. For the third and fourth section, there is an additional 7.5 horsepower pump. In actuality, neither the motors nor control power are fully loaded. Hence, the **measured** running amps will be 20% less and 30% less.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.
6. The drive motors on this machine are inverter-driven. The wire size for the wiring between the inverter and each motor (normally factory-supplied) is per the US National Electric Code, section 430-28, which states: “Feeder tap conductors shall have an ampacity not less than that required by Part B,

External Fuse or Breaker and Wire Sizes for Welded Continuous Batch Washers with TEN Horsepower per Welded Group

76028 and 76039 PulseFlow®2 CBW (steamless)

shall terminate in a branch-circuit protective device and, in addition, shall have an ampacity of at least one-third that of the feeder conductors, be protected from physical damage and be not more than 25 feet (7.62m) in length." The following table shows the feeder tap wire size used by Milnor for a given feeder conductor (main feeder) wire size:

Table 2. Feeder Tap Wire Sizes

	Feeder Conductor	Feeder Tap
Wire (AWG/mm²)	0000 / 120	4 / 25
	000 / 95	4 / 25
	00 / 70	6 / 16
	0 / 70	8 / 10
	1 / 50	8 / 10
	2 / 35	8 / 10
	3 / 35	8 / 10
	4 / 25	8 / 10

CAUTION: **Fire hazard** — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Continuous Batch Washers with Six Horsepower Motors

92048 CBW

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Table 1 Specifications for Modules 2 — 10

Number of Modules ↓	Specification	See notes ↓	Specified values for the voltage (VAC) shown (See note 1)										
			200 VAC	208 VAC	220 VAC	240 VAC	346 VAC	380 VAC	400 VAC	415 VAC	440 VAC	480 VAC	600 VAC
2	Fuse/Breaker (Amps)	3, 5		KTN50									
	Wire (AWG/mm²)	4, 5		8 (10)									
	Running Amps	2		34									
3	Fuse/Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5											
	Running Amps	2											
4	Fuse/Breaker (Amps)	3, 5										KTS60	
	Wire (AWG/mm²)	4, 5										8 (10)	
	Running Amps	2										44	
5	Fuse/Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5											
	Running Amps	2											
6	Fuse/Breaker (Amps)	3, 5		KTN175									
	Wire (AWG/mm²)	4, 5		1/0 (54)									
	Running Amps	2		133									
7	Fuse/Breaker (Amps)	3, 5		KTN200								KTS90	KTS75
	Wire (AWG/mm²)	4, 5		2/0 (70)								3 (35)	3 (35)
	Running Amps	2		150								68	54
8	Fuse/Breaker (Amps)	3, 5		KTN225								KTS100	KTS90
	Wire (AWG/mm²)	4, 5		3/0 (95)								3 (35)	3 (35)
	Running Amps	2		167								77	62
9	Fuse/Breaker (Amps)	3, 5										KTS125	
	Wire (AWG/mm²)	4, 5										2 (35)	
	Running Amps	2										83	
10	Fuse/Breaker (Amps)	3, 5		KTN250								KTS140	KTS140
	Wire (AWG/mm²)	4, 5		4/0 (120)								2 (35)	2 (35)
	Running Amps	2		200								93	93

External Fuse or Breaker and Wire Sizes for Continuous Batch Washers with Six Horsepower Motors

92048 CBW

Table 2 Specifications for modules 11 — 20

Number of Modules ↓	Specification	See notes ↓	Specified values for the voltage (VAC) shown (See note 1)										
			200 VAC	208 VAC	220 VAC	240 VAC	346 VAC	380 VAC	400 VAC	415 VAC	440 VAC	480 VAC	600 VAC
11	Fuse/Breaker (Amps)	3, 5										KTS170	
	Wire (AWG/mm²)	4, 5										1 (50)	
	Running Amps	2										102	
12	Fuse/Breaker (Amps)	3, 5	KTN350	KTN350	KTN350	KTN300						KTS150	
	Wire (AWG/mm²)	4, 5	350MCM (185)	350MCM (185)	300MCM (185)	250 (150)						1 (50)	
	Running Amps	2	276	265	251	230						115	
13	Fuse/Breaker (Amps)	3, 5										KTS190	
	Wire (AWG/mm²)	4, 5										1/0 (70)	
	Running Amps	2										120	
14	Fuse/Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5											
	Running Amps	2											
15	Fuse/Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5											
	Running Amps	2											
16	Fuse/Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5											
	Running Amps	2											
17	Fuse/Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5											
	Running Amps	2											
18	Fuse/Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5											
	Running Amps	2											
19	Fuse/Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5											
	Running Amps	2											
20	Fuse/Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5											
	Running Amps	2											

External Fuse or Breaker and Wire Sizes for Continuous Batch Washers with Six Horsepower Motors

92048 CBW

Notes

1. Running amps, fuse size and wire size for a given voltage are the same, regardless of frequency (50 Hz or 60 Hz).
2. The **calculated** running amps shown in the table are with all motors fully loaded and up to speed plus 3 KVA of control power. The motors include all drive motors plus up to seven, 2.0 horsepower motors (six pumps and a loading conveyor). In actuality, neither the motors nor control power are fully loaded. Hence, the **measured** running amps will be 20% to 30% less.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type and match the amperage rating in the “Fuse/Breaker (Amps)” row. If standard circuit breakers are used, they must match the amperage rating listed in the “Running Amps” row. If inverse time circuit breakers are used, they must match the amperage rating listed in the “Fuse/Breaker (Amps)” row. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Continuous Batch Washers With Six Horsepower Motors

92048 CBW PulseFlow®

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Table 1. Specifications

Number of Modules ↓	Specification	See notes ↓	Specified values for the voltage (VAC) shown (See note 1)										
			200 VAC	208 VAC	220 VAC	240 VAC	346 VAC	380 VAC	400 VAC	415 VAC	440 VAC	480 VAC	600 VAC
2	Fuse/Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5											
	Running Amps	2											
3	Fuse/Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5											
	Running Amps	2											
4	Fuse/Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5											
	Running Amps	2											
5	Fuse/Breaker (Amps)	3, 5							KTS125				
	Wire (AWG/mm²)	4, 5							2 (50)				
	Running Amps	2							97				
6	Fuse/Breaker (Amps)	3, 5							KTS125			KTS125	
	Wire (AWG/mm²)	4, 5							2 (50)			3 (35)	
	Running Amps	2							106			88	
7	Fuse/Breaker (Amps)	3, 5										KTS125	
	Wire (AWG/mm²)	4, 5										2 (50)	
	Running Amps	2										99	
8	Fuse/Breaker (Amps)	3, 5						KTS175				KTS140	
	Wire (AWG/mm²)	4, 5						0 (70)				2 (50)	
	Running Amps	2						136				108	
9	Fuse/Breaker (Amps)	3, 5										KTS150	
	Wire (AWG/mm²)	4, 5										1 (50)	
	Running Amps	2										117	
10	Fuse/Breaker (Amps)	3, 5										KTS175	
	Wire (AWG/mm²)	4, 5										0 (50)	
	Running Amps	2										126	
11	Fuse/Breaker (Amps)	3, 5										KTS175	
	Wire (AWG/mm²)	4, 5										0 (70)	
	Running Amps	2										134	
12	Fuse/Breaker (Amps)	3, 5										KTS200	
	Wire (AWG/mm²)	4, 5										2/0 (70)	
	Running Amps	2										142	

External Fuse or Breaker and Wire Sizes for Continuous Batch Washers With Six Horsepower Motors

92048 CBW PulseFlow®

Notes

1. Running amps, fuse size and wire size for a given voltage are the same, regardless of frequency (50 Hz or 60 Hz).
2. The **calculated** running amps shown in the table are with all motors fully loaded and up to speed plus 3 KVA of control power. For the one to six modules, the motors include all drive motors plus one 2.0 horsepower motor, one 5.0 horsepower motor, one 7.5 horsepower motor, and one 3.0 horsepower motor. For the seven to ten modules, an additional 7.5 horsepower pump is added. In actuality, neither the motors nor control power are fully loaded. Hence, the **measured** running amps will be 20% to 30% less.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type and match the amperage rating in the “Fuse/Breaker (Amps)” row. If standard circuit breakers are used, they must match the amperage rating listed in the “Running Amps” row. If inverse time circuit breakers are used, they must match the amperage rating listed in the “Fuse/Breaker (Amps)” row. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Continuous Batch Washers with Six Horsepower Motors

92048 CBW PulseFlow® Plus Alternate PulseFlow®

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Table 1 Specifications

Number of Modules ↓	Specification	See notes ↓	Specified values for the voltage (VAC) shown (See note 1)										
			200 VAC	208 VAC	220 VAC	240 VAC	346 VAC	380 VAC	400 VAC	415 VAC	440 VAC	480 VAC	600 VAC
2	Fuse/Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5											
	Running Amps	2											
3	Fuse/Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5											
	Running Amps	2											
4	Fuse/Breaker (Amps)	3, 5											
	Wire (AWG/mm²)	4, 5											
	Running Amps	2											
5	Fuse/Breaker (Amps)	3, 5							KTS125				
	Wire (AWG/mm²)	4, 5							2 (50)				
	Running Amps	2							111				
6	Fuse/Breaker (Amps)	3, 5							KTS125			KTS125	
	Wire (AWG/mm²)	4, 5							1 (50)			2 (50)	
	Running Amps	2							120			100	
7	Fuse/Breaker (Amps)	3, 5										KTS125	
	Wire (AWG/mm²)	4, 5										2 (50)	
	Running Amps	2										111	
8	Fuse/Breaker (Amps)	3, 5						KTS175				KTS140	
	Wire (AWG/mm²)	4, 5						2/0 (70)				1 (50)	
	Running Amps	2						151				120	
9	Fuse/Breaker (Amps)	3, 5										KTS150	
	Wire (AWG/mm²)	4, 5										1 (50)	
	Running Amps	2										129	
10	Fuse/Breaker (Amps)	3, 5										KTS175	
	Wire (AWG/mm²)	4, 5										0 (50)	
	Running Amps	2										138	
11	Fuse/Breaker (Amps)	3, 5										KTS175	
	Wire (AWG/mm²)	4, 5										0 (70)	
	Running Amps	2										146	
12	Fuse/Breaker (Amps)	3, 5										KTS200	
	Wire (AWG/mm²)	4, 5										2/0 (70)	
	Running Amps	2										154	

External Fuse or Breaker and Wire Sizes for Continuous Batch Washers with Six Horsepower Motors

92048 CBW PulseFlow® Plus Alternate PulseFlow®

Notes

1. Running amps, fuse size and wire size for a given voltage are the same, regardless of frequency (50 Hz or 60 Hz).
2. The **calculated** running amps shown in the table are with all motors fully loaded and up to speed plus 3 KVA of control power. For the one to six modules, the motors include all drive motors plus one 2.0 horsepower motor, one 5.0 horsepower motor, one 7.5 horsepower motor, and one 3.0 horsepower motor. For the seven to ten modules, an additional 7.5 horsepower pump is added. In actuality, neither the motors nor control power are fully loaded. Hence, the **measured** running amps will be 20% to 30% less.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type and match the amperage rating in the “Fuse/Breaker (Amps)” row. If standard circuit breakers are used, they must match the amperage rating listed in the “Running Amps” row. If inverse time circuit breakers are used, they must match the amperage rating listed in the “Fuse/Breaker (Amps)” row. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: **Fire hazard —** An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

Membrane Press, Single Stage Press and Centrifugal Extractor

3

External Fuse or Breaker and Wire Sizes for Single Stage Presses
MP1601CL, CR, L, R

Table 1: Specifications (Largest motor: 13.25 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	32	3	50	FRN70	125	08 / 10.00
52	208	31	3	60	FRN70	125	08 / 10.00
62	220	29	3	50	FRN60	125	08 / 10.00
66	220	29	3	60	FRN60	125	08 / 10.00
74	240	26	3	60	FRN60	100	08 / 10.00
81	346	18.5	3	50	FRS40	70	10 / 6.00
82	380	17	3	50	FRS35	70	10 / 6.00
83	380	17	3	60	FRS35	70	10 / 6.00
84	400	16	3	50	FRS35	70	10 / 6.00
85	415	15.5	3	50	FRS35	60	10 / 6.00
88	440	14.5	3	50	FRS30	60	10 / 6.00
94	440	14.5	3	60	FRS30	60	10 / 6.00
96	480	13.5	3	60	FRS30	50	10 / 6.00
98	600	11	3	60	FRS25	45	12 / 4.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

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External Fuse or Breaker and Wire Sizes for Single Stage Presses

MP1540CL, CR, L, R; MP1550CL, CR, L, R (Standard and Rapid-Flow); MP1602CL, CR, L, R; MP1603CL, CR, L, R (Standard and Rapid-Flow); MP1640CL, CR, L, R; MPL640CL, CR, L, R

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Table 1. Specifications (Largest motor: 15HP) Total HP 20.75

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	70	3	50	FRN100	200	04 / 25.00
52	208	67	3	60	FRN100	200	04 / 25.00
62	220	63	3	50	FRN90	175	04 / 25.00
66	220	63	3	60	FRN90	175	04 / 25.00
74	240	58	3	60	FRN90	175	06 / 16.00
81	346	40	3	50	FRS60	110	08 / 10.00
82	380	37	3	50	FRS60	100	08 / 10.00
83	380	37	3	60	FRS60	100	08 / 10.00
84	400	35	3	50	FRS50	100	08 / 10.00
85	415	34	3	50	FRS50	90	08 / 10.00
88	440	32	3	50	FRS45	90	08 / 10.00
94	440	32	3	60	FRS45	90	08 / 10.00
96	480	29	3	60	FRS45	80	08 / 10.00
98	600	23	3	60	FRS45	70	10 / 6.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Single Stage Presses

MP1540CL, CR, L, R; MP1550CL, CR, L, R (Standard and Rapid-Flow); MP1602CL, CR, L, R; MP1603CL, CR, L, R (Standard and Rapid-Flow); MP1640CL, CR, L, R; MPL640CL, CR, L, R

CAUTION: **Fire hazard** — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Single Stage Presses

MP1556CL, CR, L, R and MPL556CL, CR, L, R

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Table 1. Motor Size and Horsepower

Models	Largest Motor	Total Horsepower
MP**1**556CL, CR, L, R	15HP	30.75
MP**L**556CL, CR, L , R	20HP	25.75

Table 2. Fuse OR Circuit Breaker and Wire Size for Available Voltages

Volt Code	Voltage (VAC)See note 1	Running AmpsSee note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	104	3	50	FRN125	200	02 / 35.00
52	208	98	3	60	FRN125	200	02 / 35.00
62	220	86	3	50	FRN110	175	02 / 35.00
66	220	86	3	60	FRN110	175	02 / 35.00
74	240	86	3	60	FRN110	175	04/ 25.00
81	346	59	3	50	FRS80	110	06 / 25.00
82	380	53	3	50	FRS70	100	06 / 25.00
83	380	53	3	60	FRS70	100	06 / 25.00
84	400	51	3	50	FRS70	100	06 / 25.00
85	415	49	3	50	FRS60	90	06 / 25.00
88	440	46	3	50	FRS60	90	06 / 25.00
94	440	46	3	60	FRS60	90	06 / 25.00
96	480	44	3	60	FRS60	80	06 / 25.00
98	600	33	3	60	FRS45	70	08 / 25.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.

External Fuse or Breaker and Wire Sizes for Single Stage Presses

MP1556CL, CR, L, R and MPL556CL, CR, L, R

5. See document BFUUUF01 “External Fuse...Requirements” for more information.

CAUTION: Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Single Stage Presses

MP1640CL, CR, L, R (Booster Pump 13” Ram)

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Table 1 Specifications (Largest motor: 15HP) Total HP 30.75

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	70	3	50	FRN125	200	04 / 25.00
52	208	67	3	60	FRN125	200	04 / 25.00
62	220	63	3	50	FRN110	175	04 / 25.00
66	220	63	3	60	FRN110	175	04 / 25.00
74	240	58	3	60	FRN110	175	06 / 16.00
81	346	40	3	50	FRS75	110	08 / 10.00
82	380	37	3	50	FRS75	100	08 / 10.00
83	380	37	3	60	FRS75	100	08 / 10.00
84	400	35	3	50	FRS60	100	08 / 10.00
85	415	34	3	50	FRS60	90	08 / 10.00
88	440	32	3	50	FRS60	90	08 / 10.00
94	440	32	3	60	FRS60	90	08 / 10.00
96	480	29	3	60	FRS60	80	08 / 10.00
98	600	23	3	60	FRS40	70	10 / 6.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Single Stage Presses

MP1640CL, CR, L, R (Booster Pump 13” Ram)

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Single Stage Presses

Standard MP1604CL, CR, L, R (See BFPPLF01 for Rapid-Flow MP1604 with 30 HP motor; Total HP 35.75)

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Table 1. Specifications (Largest motor: 20HP) Total HP 25.75

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	82	3	50	FRN110	200	03 / 25.00
52	208	79	3	60	FRN110	200	03 / 25.00
62	220	75	3	50	FRN100	175	04 / 25.00
66	220	75	3	60	FRN100	175	04 / 25.00
74	240	70	3	60	FRN100	175	04 / 25.00
81	346	46	3	50	FRS70	110	08 / 10.00
82	380	43	3	50	FRS70	100	08 / 10.00
83	380	43	3	60	FRS70	100	08 / 10.00
84	400	41	3	50	FRS60	100	08 / 10.00
85	415	40	3	50	FRS60	90	08 / 10.00
88	440	38	3	50	FRS50	90	08 / 10.00
94	440	38	3	60	FRS50	90	08 / 10.00
96	480	35	3	60	FRS50	80	08 / 10.00
98	600	29	3	60	FRS40	70	10 / 6.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Single Stage Presses

Standard MP1604CL, CR, L, R (See BFPPLF01 for Rapid-Flow MP1604 with 30 HP motor; Total HP 35.75)

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Single Stage Presses

MP1656CL, CR, L, R and MPL656CL, CR, L, R

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Table 1. Motor Size and Horsepower

Models	Largest Motor	Total Horsepower
MP**1**656CL, CR, L, R	26/30 HP	45.75
MP**L**656CL, CR, L, R	30 HP	35.75

Table 2. Fuse OR Circuit Breaker and Wire Size for Available Voltages

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	120	3	50	FRN200	250	02 / 35.00
52	208	114	3	60	FRN200	250	02 / 35.00
62	220	107	3	50	FRN200	250	02 / 35.00
66	220	107	3	60	FRN200	250	02 / 35.00
74	240	107	3	60	FRN200	250	02 / 35.00
81	346	74	3	50	FRS120	175	02 / 35.00
82	380	66	3	50	FRS120	175	04 / 25.00
83	380	66	3	60	FRS120	175	04 / 25.00
84	400	61	3	50	FRS100	160	06 / 25.00
85	415	59	3	50	FRS100	160	06 / 25.00
88	440	58	3	50	FRS100	160	06 / 25.00
94	440	58	3	60	FRS100	160	06 / 25.00
96	480	54	3	60	FRS100	160	06 / 25.00
98	600	23	3	60	FRS60	110	08 / 25.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Single Stage Presses

MP1656CL, CR, L, R and MPL656CL, CR, L, R

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Single Stage Presses

MP1A03CL, CR, L, R Manufactured before December 15, 2006; MP1650 & MP1604CL, CR, L, R with Rapid Flow (See BFPPKF01 & BFPPLF02)

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Table 1. Specifications (Largest motor: 30HP) Total HP 35.75

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	86	3	50	FRN175	250	02 / 35.00
52	208	83	3	60	FRN175	250	02 / 35.00
62	220	79	3	50	FRN175	250	02 / 35.00
66	220	79	3	60	FRN175	250	02 / 35.00
74	240	79	3	60	FRN175	250	02 / 35.00
81	346	55	3	50	FRS110	175	02 / 35.00
82	380	50	3	50	FRS100	175	06 / 25.00
83	380	50	3	60	FRS100	175	06 / 25.00
84	400	47	3	50	FRS90	150	06 / 25.00
85	415	45	3	50	FRS90	150	06 / 25.00
88	440	44	3	50	FRS90	150	06 / 25.00
94	440	44	3	60	FRS90	150	06 / 25.00
96	480	40	3	60	FRS80	150	06 / 25.00
98	600	23	3	60	FRS60	110	08 / 25.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Single Stage Presses

MP1A03CL, CR, L, R Manufactured before December 15, 2006; MP1650 & MP1604CL, CR, L, R with Rapid Flow (See BFPPKF01 & BFPPLF02)

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker & Wire Sizes for Single Stage Presses MP1A03CL, CR, L, R Manufactured on or after December 15, 2006, or prior to this date with Rapid Flow

(See BFPPKF01 and BFPPLF01)

Table 1: Specifications (Largest motor:40 HP) Total HP 45.75

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	120	3	50	FRN175	250	02 / 35.00
52	208	117	3	60	FRN175	250	02 / 35.00
62	220	113	3	50	FRN175	250	02 / 35.00
66	220	113	3	60	FRN175	250	02 / 35.00
74	240	103	3	60	FRN175	250	02 / 35.00
81	346	75	3	50	FRS110	175	04 / 25.00
82	380	70	3	50	FRS100	175	04 / 25.00
83	380	70	3	60	FRS100	175	04 / 25.00
84	400	67	3	50	FRS90	150	04 / 25.00
85	415	65	3	50	FRS90	150	04 / 25.00
88	440	64	3	50	FRS90	150	04 / 25.00
94	440	64	3	60	FRS90	150	04 / 25.00
96	480	60	3	60	FRS80	150	06 / 16.00
98	600	31	3	60	FRS60	110	08 / 10.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFPPLF02 —

External Fuse or Breaker and Wire Sizes for Single Stage Presses

MP1A50 & MP1A56CL, CR, L, R

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Table 1 Specifications (Largest motor: 40HP) Total HP 55.75

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	145	3	50	FRN250	300	00 / 35.00
52	208	143	3	60	FRN250	300	00 / 35.00
62	220	137	3	50	FRN250	300	00 / 35.00
66	220	137	3	60	FRN250	300	00 / 35.00
74	240	125	3	60	FRN200	250	01 / 35.00
81	346	86	3	50	FRS125	175	04 / 25.00
82	380	81	3	50	FRS125	175	04 / 25.00
83	380	81	3	60	FRS125	175	04 / 25.00
84	400	78	3	50	FRS110	150	04 / 25.00
85	415	76	3	50	FRS110	150	04 / 25.00
88	440	75	3	50	FRS110	150	04 / 25.00
94	440	75	3	60	FRS110	150	04 / 25.00
96	480	71	3	60	FRS100	150	04 / 25.00
98	600	40	3	60	FRS70	110	08 / 10.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Single Stage Presses

MP1A50 & MP1A56CL, CR, L, R

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Two-stage Presses

MP2501CL, CR, L, R; MP2601CL, CR, L, R

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Table 1 Specifications (Largest motor: 22.75HP) Running Amps (Standard Flow/Hi-Flow)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	66 / 72	3	50	FRN125	150	04 / 25.00
52	208	63 / 70	3	60	FRN125	150	04 / 25.00
62	220	59 / 66	3	50	FRN110	125	04 / 25.00
66	220	59 / 66	3	60	FRN110	125	04 / 25.00
74	240	54 / 60	3	60	FRN100	110	04 / 25.00
81	346	38 / 42	3	50	FRS70	80	06 / 16.00
82	380	34 / 38	3	50	FRS70	80	08 / 10.00
83	380	34 / 38	3	60	FRS70	80	08 / 10.00
84	400	33 / 36	3	50	FRS60	70	08 / 10.00
85	415	31 / 35	3	50	FRS60	70	08 / 10.00
88	440	30 / 33	3	50	FRS60	70	08 / 10.00
94	440	30 / 33	3	60	FRS60	70	08 / 10.00
96	480	27 / 30	3	60	FRS50	60	08 / 10.00
98	600	22 / 24	3	60	FRS40	50	10 / 6.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Two-stage Presses

MP2501CL, CR, L, R; MP2601CL, CR, L, R

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Two-stage Presses

MP2606CL, CR. L, R

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Table 1 Specifications (Largest motor: 42.75HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	124	3	50	FRN200	300	00 / 70.00
52	208	119	3	60	FRN200	300	0 / 70.00
62	220	113	3	50	FRN200	300	0 / 70.00
66	220	113	3	60	FRN200	300	0 / 70.00
74	240	103	3	60	FRN175	250	01 / 50.00
81	346	72	3	50	FRS125	200	03 / 35.00
82	380	65	3	50	FRS110	175	04 / 25.00
83	380	65	3	60	FRS110	175	04 / 25.00
84	400	62	3	50	FRS110	175	04 / 25.00
85	415	60	3	50	FRS100	150	04 / 25.00
88	440	56	3	50	FRS100	150	04 / 25.00
94	440	56	3	60	FRS100	150	04 / 25.00
96	480	52	3	60	FRS90	150	06 / 16.00
98	600	41	3	60	FRS70	110	06 / 16.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Two-stage Presses

MP2606CL, CR. L, R

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Single Stage Presses
TP1607CL, CR, L, R

Table 1: Specifications (Largest motor: 15 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	48	3	50	FRN100	200	06 / 16.00
52	208	46.5	3	60	FRN100	200	06 / 16.00
62	220	44	3	50	FRN90	175	06 / 16.00
66	220	44	3	60	FRN90	175	06 / 16.00
74	240	40	3	60	FRN90	175	06 / 16.00
81	346	28	3	50	FRS60	110	08 / 10.00
82	380	25.5	3	50	FRS60	100	08 / 10.00
83	380	24	3	60	FRS60	100	08 / 10.00
84	400	24	3	50	FRS50	100	08 / 10.00
85	415	23	3	50	FRS50	90	10 / 6.00
88	440	22	3	50	FRS45	90	10 / 6.00
94	440	22	3	60	FRS45	90	10 / 6.00
96	480	20	3	60	FRS45	80	10 / 6.00
98	600	16	3	60	FRS35	70	10 / 6.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFPPTF01 —

External Fuse or Breaker and Wire Sizes for Centrifugal Extractors
M7E42AHL, M7E42AHR, M7E42ALL, M7E42ALR

Table 1: Specifications (Largest motor: 10 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	32	3	50	FRN70	125	08 / 10.00
52	208	31	3	60	FRN70	125	08 / 10.00
62	220	29	3	50	FRN60	125	08 / 10.00
66	220	29	3	60	FRN60	125	08 / 10.00
74	240	26	3	60	FRN60	100	08 / 10.00
81	346	18.5	3	50	FRS40	70	10 / 6.00
82	380	17	3	50	FRS35	70	10 / 6.00
83	380	17	3	60	FRS35	70	10 / 6.00
84	400	16	3	50	FRS35	70	10 / 6.00
85	415	15.5	3	50	FRS35	60	10 / 6.00
88	440	14.5	3	50	FRS30	60	10 / 6.00
94	440	14.5	3	60	FRS30	60	10 / 6.00
96	480	13.5	3	60	FRS30	50	10 / 6.00
98	600	11	3	60	FRS25	45	12 / 4.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFPE7F01 —

External Fuse or Breaker and Wire Sizes for Centrifugal Extractors
M9E42AHL, HR, LL, LR

Table 1: Specifications (Largest motor: 15 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	32	3	50	FRN70	125	08 / 10.00
52	208	31	3	60	FRN70	125	08 / 10.00
62	220	29	3	50	FRN60	125	08 / 10.00
66	220	29	3	60	FRN60	125	08 / 10.00
74	240	26	3	60	FRN60	100	08 / 10.00
81	346	18.5	3	50	FRS40	70	10 / 6.00
82	380	17	3	50	FRS35	70	10 / 6.00
83	380	17	3	60	FRS35	70	10 / 6.00
84	400	16	3	50	FRS35	70	10 / 6.00
85	415	15.5	3	50	FRS35	60	10 / 6.00
88	440	14.5	3	50	FRS30	60	10 / 6.00
94	440	14.5	3	60	FRS30	60	10 / 6.00
96	480	13.5	3	60	FRS30	50	10 / 6.00
98	600	11	3	60	FRS25	45	12 / 4.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFPE9F01 —

External Fuse or Breaker and Wire Sizes for Centrifugal Extractors
M7V42AHL, M7V42AHR, M7V42ALL, M7V42ALR
M7V4232C, L, R

Table 1: Specifications (Largest motor: 20 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	43	3	50	FRN70	125	06 / 16.00
52	208	42	3	60	FRN70	125	06 / 16.00
62	220	40	3	50	FRN70	125	06 / 16.00
66	220	40	3	60	FRN70	125	06 / 16.00
74	240	38	3	60	FRN70	100	06 / 16.00
81	346	27	3	50	FRS50	70	08 / 10.00
82	380	25	3	50	FRS40	70	08 / 10.00
83	380	25	3	60	FRS40	70	08 / 10.00
84	400	24	3	50	FRS40	70	08 / 10.00
85	415	22	3	50	FRS40	60	08 / 10.00
88	440	20	3	50	FRS40	60	08 / 10.00
94	440	20	3	60	FRS40	60	08 / 10.00
96	480	16	3	60	FRS40	50	08 / 10.00
98	600	16	3	60	FRS40	45	08 / 10.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFPV7F01 —

External Fuse or Breaker and Wire Sizes for Centrifugal Extractors
M9V42AHL, HR, LL, LR
M9V4232C, L, R

Table 1: Specifications (Largest motor: 20 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	43	3	50	FRN70	125	06 / 16.00
52	208	42	3	60	FRN70	125	06 / 16.00
62	220	40	3	50	FRN70	125	06 / 16.00
66	220	40	3	60	FRN70	125	06 / 16.00
74	240	38	3	60	FRN70	100	06 / 16.00
81	346	27	3	50	FRS50	70	08 / 10.00
82	380	25	3	50	FRS40	70	08 / 10.00
83	380	25	3	60	FRS40	70	08 / 10.00
84	400	24	3	50	FRS40	70	08 / 10.00
85	415	22	3	50	FRS40	60	08 / 10.00
88	440	20	3	50	FRS40	60	08 / 10.00
94	440	20	3	60	FRS40	60	08 / 10.00
96	480	16	3	60	FRS40	50	08 / 10.00
98	600	16	3	60	FRS40	45	08 / 10.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFPV9F01 —

External Fuse or Breaker and Wire Sizes for Centrifugal Extractors

M7V4840, M7T4840, M9V4840, M9T4840 C, L, R

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Table 1 Specifications (Largest motor: M7V/T — 50HP; M9V/T — 60HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	107	3	50	FRN250	275	000 / 95.00
52	208	102	3	60	FRN250	275	000 / 95.00
62	220	95	3	50	FRN250	275	000 / 95.00
66	220	95	3	60	FRN250	275	000 / 95.00
74	240	92	3	60	FRN250	275	000 / 95.00
81	346	61	3	50	FRS175	200	01 / 50.00
82	380	57	3	50	FRS150	175	01 / 50.00
83	380	57	3	60	FRS150	175	01 / 50.00
84	400	53	3	50	FRS150	175	01 / 50.00
85	415	52	3	50	FRS150	175	01 / 50.00
88	440	48	3	50	FRS125	150	02 / 35.00
94	440	44	3	60	FRS125	150	02 / 35.00
96	480	40	3	60	FRS125	150	02 / 35.00
98	600	33	3	60	FRS125	150	02 / 35.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Centrifugal Extractors

M7V4840, M7T4840, M9V4840, M9T4840 C, L, R

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Centrifugal Extractors

MMV4232C, L, R; MMT4232C, L, R; MXV4232C, L, R (Fast Discharge); MXT4232C, L, R (Fast Discharge)

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Table 1. Specifications (Largest motor: 40HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	97	3	50	FRN150	200	00 / 70.00
52	208	93	3	60	FRN150	190	00 / 70.00
62	220	86	3	50	FRN125	190	01 / 50.00
66	220	86	3	60	FRN125	190	01 / 50.00
74	240	84	3	60	FRN115	180	02 / 35.00
81	346	55	3	50	FRS90	130	04 / 25.00
82	380	51	3	50	FRS80	120	04 / 25.00
83	380	51	3	60	FRS80	120	04 / 25.00
84	400	48	3	50	FRS80	120	04 / 25.00
85	415	47	3	50	FRS80	120	04 / 25.00
88	440	44	3	50	FRS70	120	04 / 25.00
94	440	40	3	60	FRS70	120	04 / 25.00
96	480	37	3	60	FRS60	110	06 / 16.00
98	600	30	3	60	FRS40	80	08 / 10.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Centrifugal Extractors

MMV4232C, L, R; MMT4232C, L, R; MXV4232C, L, R (Fast Discharge); MXT4232C, L, R (Fast Discharge)

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Centrifugal Extractors

MXV4232C, L, R; MXS4232C, L, R; MXT4232C, L, R

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Table 1 Specifications (Largest motor: 30HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	73	3	50	FRN125	190	00 / 70.00
52	208	70	3	60	FRN125	180	00 / 70.00
62	220	66	3	50	FRN115	180	01 / 50.00
66	220	66	3	60	FRN115	180	01 / 50.00
74	240	63	3	60	FRN110	170	03 / 35.00
81	346	42	3	50	FRS80	130	04 / 25.00
82	380	39	3	50	FRS70	120	06 / 16.00
83	380	39	3	60	FRS70	120	06 / 16.00
84	400	37	3	50	FRS70	110	06 / 16.00
85	415	36	3	50	FRS70	110	06 / 16.00
88	440	34	3	50	FRS70	110	06 / 16.00
94	440	31	3	60	FRS70	110	06 / 16.00
96	480	29	3	60	FRS60	110	06 / 16.00
98	600	23	3	60	FRS35	80	08 / 10.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Centrifugal Extractors

MXV4232C, L, R; MXS4232C, L, R; MXT4232C, L, R

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

Dryers and Dryvacs

4

External Fuse or Breaker and Wire Sizes for Dryers

50040 & 50050 CS1, CS2, CT1, CT2, SB1, SB2, TG1, TG2, TS1, TS2, TT1, TT2

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Table 1 Specifications (Largest motor: 7.5HP; 50040 CT1, CT2, TG1, TG2, TT1, TT2 = 8.75HP Total; 50040 CS1, CS2, SB1, SB2, TS1, TS2 = 8.5HP Total)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2 CT1, TG1, TT1	Running Amps See note 2 CS1, SB1, TS1	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
						Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	30	29	3	50	FRN60	100	08 / 10.00
52	208	29	28	3	60	FRN60	100	08 / 10.00
62	220	27	26	3	50	FRN60	100	08 / 10.00
66	220	27	26	3	60	FRN60	100	08 / 10.00
74	240	25	24	3	60	FRN50	90	08 / 10.00
81	346	17	17	3	50	FRS35	60	10 / 6.00
82	380	16	16	3	50	FRS30	60	10 / 6.00
83	380	16	16	3	60	FRS30	60	10 / 6.00
84	400	15	15	3	50	FRS25	50	10 / 6.00
85	415	14.5	14	3	50	FRS25	50	12 / 4.00
88	440	13.5	13	3	50	FRS25	45	12 / 4.00
94	440	13.5	13	3	60	FRS25	45	12 / 4.00
96	480	12.5	12	3	60	FRS25	40	12 / 4.00
98	600	10	10	3	60	FRS20	35	12 / 4.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Dryers

50040 & 50050 CS1, CS2, CT1, CT2, SB1, SB2, TG1, TG2, TS1, TS2, TT1, TT2

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Dryers

50040 & 50050 CS1, CS2, CT1, CT2, SB1, SB2, TG1, TG2, TS1, TS2, TT1, TT2 with Blower Inverter

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Table 1 Specifications (Largest motor: 7.5HP; 50040 CT1, CT2, TG1, TG2, TT1, TT2 = 8.75HP Total; 50040 CS1, CS2, SB1, SB2, TS1, TS2 = 8.5HP Total)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2 CT1, TG1, TT1	Running Amps See note 2 CS1, SB1, TS1	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
						Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	30	29	3	50	FRN40	70	08 / 10.00
52	208	29	28	3	60	FRN40	70	08 / 10.00
62	220	27	26	3	50	FRN40	70	08 / 10.00
66	220	27	26	3	60	FRN40	70	08 / 10.00
74	240	25	24	3	60	FRN35	60	08 / 10.00
81	346	17	17	3	50	FRS25	40	10 / 6.00
82	380	16	16	3	50	FRS20	40	10 / 6.00
83	380	16	16	3	60	FRS20	40	10 / 6.00
84	400	15	15	3	50	FRS20	40	10 / 6.00
85	415	14.5	14	3	50	FRS20	40	12 / 4.00
88	440	13.5	13	3	50	FRS20	35	12 / 4.00
94	440	13.5	13	3	60	FRS20	35	12 / 4.00
96	480	12.5	12	3	60	FRS20	35	12 / 4.00
98	600	10	10	3	60	FRS20	30	12 / 4.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Dryers

50040 & 50050 CS1, CS2, CT1, CT2, SB1, SB2, TG1, TG2, TS1, TS2, TT1, TT2 with Blower Inverter

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Dryers 58040 CS1, CT1, SB1, TG1, TG2, TS1, TT1

Table 1: Specifications (Largest motor: 58040 CT1, TG1, TG2, TT1 =10HP: 58040 CS1, SB1, TS1 =9.5HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2 CT1, TG1,TG2, TT1	Running Amps - See note 2 CS1,SB1,TS1	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
						Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	35.5	33	3	50	FRN60	100	08 / 10.00
52	208	34	32	3	60	FRN60	100	08 / 10.00
62	220	32	30	3	50	FRN60	90	08 / 10.00
66	220	32	30	3	60	FRN60	90	08 / 10.00
74	240	29.5	27.5	3	60	FRN50	80	08 / 10.00
81	346	20.5	19	3	50	FRS35	60	10 / 6.00
82	380	18.5	17.5	3	50	FRS30	60	10 / 6.00
83	380	18.5	17.5	3	60	FRS30	60	10 / 6.00
84	400	17.5	16.5	3	50	FRS25	50	10 / 6.00
85	415	17	16	3	50	FRS25	50	12 / 4.00
88	440	16	15	3	50	FRS25	45	12 / 4.00
94	440	16	15	3	60	FRS25	45	12 / 4.00
96	480	14.5	14	3	60	FRS25	40	12 / 4.00
98	600	12	11	3	60	FRS20	35	12 / 4.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFPDKF01 —

External Fuse or Breaker and Wire Sizes for Dryers 58058 CS1, CT1, SB1, TG1, TG2, TS1, TT1

Table 1: Specifications (Largest motor: 58058 CT1, TG1,TG2, TT1, =13.5HP; 58058 CS1, SB1, TS1, =13HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2 CT1, TG1, TG2, TT1	Running Amps - See note 2 CS1,SB1, TS1	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
						Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	45.5	43	3	50	FRN80	125	06 / 16.00
52	208	43.5	41.5	3	60	FRN70	125	06 / 16.00
62	220	41.5	39	3	50	FRN70	125	06 / 16.00
66	220	41.5	39	3	60	FRN70	125	06 / 16.00
74	240	38	36	3	60	FRN70	100	06 / 16.00
81	346	26.5	25	3	50	FRS50	70	08 / 10.00
82	380	24	22.5	3	50	FRS40	70	10 / 6.00
83	380	24	22.5	3	60	FRS40	70	10 / 6.00
84	400	22.5	21.5	3	50	FRS40	70	10 / 6.00
85	415	22	21	3	50	FRS35	60	10 / 6.00
88	440	20.5	19.5	3	50	FRS35	60	10 / 6.00
94	440	20.5	19.5	3	60	FRS35	60	10 / 6.00
96	480	19	18	3	60	FRS35	50	10 / 6.00
98	600	15	14.5	3	60	FRS30	45	12 / 4.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFPDLF01 —

External Fuse or Breaker and Wire Sizes for Dryers 58080 CS1, CT1, SB1, TG2, TS1, TT1

Table 1: Specifications (Largest motor: 5880 CT1, TG2, TT1 =26HP; 5880 CS1, SB1, TS1,=25HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2 CT1,TG2, TT1	Running Amps - See note 2 CS1, SB1,TS1	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
						Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	84	78	3	50	FRN150	250	02 / 35.00
52	208	81	75	3	60	FRN150	250	02 / 35.00
62	220	76	70	3	50	FRN150	225	03 / 35.00
66	220	76	70	3	60	FRN150	225	03 / 35.00
74	240	70	65	3	60	FRN125	200	03 / 35.00
81	346	48	45	3	50	FRS90	150	06 / 16.00
82	380	44	41	3	50	FRS80	150	06 / 16.00
83	380	44	41	3	60	FRS80	150	06 / 16.00
84	400	42	39	3	50	FRS70	125	06 / 16.00
85	415	40	38	3	50	FRS70	125	08 / 10.00
88	440	38	36	3	50	FRS70	110	08 / 10.00
94	440	38	36	3	60	FRS70	110	08 / 10.00
96	480	35	33	3	60	FRS60	110	08 / 10.00
98	600	28	26	3	60	FRS50	90	08 / 10.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFPDMF01 —

External Fuse or Breaker and Wire Sizes for Dryers

6450, 6458 & 6464 TG1L, TG1R, TS1L, TS1R, TT1L, TT1R (See BFPD6F02 if blower is inverter controlled)

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Table 1. Specifications (Largest motor: 25HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	82	3	50	FRN150	250	02 / 35.00
52	208	78	3	60	FRN150	250	02 / 35.00
62	220	68	3	50	FRN150	250	03 / 35.00
66	220	68	3	60	FRN150	250	03 / 35.00
74	240	62	3	60	FRN150	250	03 / 35.00
81	346	42	3	50	FRS90	150	06 / 16.00
82	380	39	3	50	FRS90	150	06 / 16.00
83	380	39	3	60	FRS90	150	06 / 16.00
84	400	38	3	50	FRS80	140	06 / 16.00
85	415	36	3	50	FRS80	140	06 / 16.00
88	440	34	3	50	FRS70	125	08 / 10.00
94	440	34	3	60	FRS70	125	08 / 10.00
96	480	31	3	60	FRS70	125	08 / 10.00
98	600	25	3	60	FRS50	90	08 / 10.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Dryers

6450, 6458 & 6464 TG1L, TG1R, TS1L, TS1R, TT1L, TT1R (See BFPD6F02 if blower is inverter controlled)

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Dryers

6450, 6458 & 6464 TG1L, TG1R, TS1L, TS1R and Blower Inverter (See BFPD6F01 if blower is not inverter-controlled)

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Table 1. Specifications (Largest motor: 25HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	82	3	50	FRN110	175	02 / 35.00
52	208	78	3	60	FRN100	150	02 / 35.00
62	220	68	3	50	FRN90	125	03 / 35.00
66	220	68	3	60	FRN90	125	03 / 35.00
74	240	62	3	60	FRN80	125	03 / 35.00
81	346	42	3	50	FRS60	90	06 / 16.00
82	380	39	3	50	FRS50	80	06 / 16.00
83	380	39	3	60	FRS50	80	06 / 16.00
84	400	38	3	50	FRS50	80	06 / 16.00
85	415	36	3	50	FRS50	80	06 / 16.00
88	440	34	3	50	FRS50	70	08 / 10.00
94	440	34	3	60	FRS50	70	08 / 10.00
96	480	31	3	60	FRS40	60	08 / 10.00
98	600	25	3	60	FRS35	50	08 / 10.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Dryers

6450, 6458 & 6464 TG1L, TG1R, TS1L, TS1R and Blower Inverter (See BFPD6F01 if blower is not inverter-controlled)

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for 72" Dryers with Side-Mounted Blowers
72072 CS1, CT1, SB1, TG1, TS1, TT1

Table 1: Specifications (Largest motor: 7272 CT1, TG1, TT1=31.5HP; 7272 CS1, SB1, TS1=30 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2 CT1, TG1, TT1	Running Amps - See note 2 CS1, SB1, TS1	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
						Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	97	95	3	50	FRN150	250	02 / 35.00
52	208	93	91	3	60	FRN150	250	02 / 35.00
62	220	88	86	3	50	FRN150	225	03 / 35.00
66	220	88	86	3	60	FRN150	225	03 / 35.00
74	240	81	79	3	60	FRN125	200	03 / 35.00
81	346	56	55	3	50	FRS90	150	06 / 16.00
82	380	51	50	3	50	FRS80	150	06 / 16.00
83	380	51	50	3	60	FRS80	150	06 / 16.00
84	400	48	47	3	50	FRS70	125	06 / 16.00
85	415	47	46	3	50	FRS70	125	08 / 10.00
88	440	44	44	3	50	FRS70	110	08 / 10.00
94	440	44	44	3	60	FRS70	110	08 / 10.00
96	480	40	40	3	60	FRS60	110	08 / 10.00
98	600	32	32	3	60	FRS50	90	08 / 10.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFPDNF01 —

External Fuse or Breaker and Wire Sizes for 72" Dryers with Top-Mounted Blowers
7272 TG1L, TG1R, TS1L, TS1R

(See BFPDPF02 if blower is inverter controlled)

Table 1: Specifications (Largest motor: 40 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2 TG1L, TG1R	Running Amps - See note 2 TS1L, TS1R	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
						Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	111	109	3	50	FRN200	250	02 / 35.00
52	208	107	105	3	60	FRN200	250	02 / 35.00
62	220	102	100	3	50	FRN200	250	02 / 35.00
66	220	102	100	3	60	FRN200	250	02 / 35.00
74	240	95	93	3	60	FRN200	250	02 / 35.00
81	346	64	62	3	50	FRS120	175	04 / 16.00
82	380	59	57	3	50	FRS110	175	06 / 16.00
83	380	59	57	3	60	FRS110	175	06 / 16.00
84	400	56	54	3	50	FRS100	150	06 / 16.00
85	415	55	53	3	50	FRS100	150	06 / 10.00
88	440	52	50	3	50	FRS100	150	06 / 10.00
94	440	52	50	3	60	FRS100	150	06 / 10.00
96	480	48	46	3	60	FRS90	150	06 / 10.00
98	600	38	36	3	60	FRS70	110	08 / 10.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFPDPF01 —

External Fuse or Breaker and Wire Sizes for 72" Dryers with Top-Mounted Blowers and Blower Inverter 7272 TG1L, TG1R, TS1L, TS1R

(See BFPDPF01 if blower is not inverter-controlled.)

Table 1: Specifications (Largest motor: 40 HP)

Volt Code	Voltage (VAC) See note 1	Running Amps - See note 2 TG1L, TG1R	Running Amps - See note 2 TS1L, TS1R	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
						Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	111	109	3	50	FRN150	225	02 / 35.00
52	208	107	105	3	60	FRN150	200	02 / 35.00
62	220	102	100	3	50	FRN125	200	02 / 35.00
66	220	102	100	3	60	FRN125	200	02 / 35.00
74	240	95	93	3	60	FRN125	200	02 / 35.00
81	346	64	62	3	50	FRS80	125	04 / 16.00
82	380	59	57	3	50	FRS80	125	06 / 16.00
83	380	59	57	3	60	FRS80	125	06 / 16.00
84	400	56	54	3	50	FRS80	110	06 / 16.00
85	415	55	53	3	50	FRS70	110	06 / 10.00
88	440	52	50	3	50	FRS70	100	06 / 10.00
94	440	52	50	3	60	FRS70	100	06 / 10.00
96	480	48	46	3	60	FRS60	100	06 / 10.00
98	600	38	36	3	60	FRS50	80	08 / 10.00

Notes:

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 "External Fuse...Requirements" for more information.

CAUTION 1: Fire hazard—An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

— End of BFPDPF02 —

External Fuse or Breaker and Wire Sizes for Dryers

76” Dryers with Non-inverter blowers — 7676TG1L, TG1R, TS1L, TS1R

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Table 1 Specifications (Largest motor: 40HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2 TG1L, TG1R	Running Amps See note 2 TS1L, TS1R	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
						Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	111	109	3	50	FRN225	275	02 / 35.00
52	208	107	105	3	60	FRN225	275	02 / 35.00
62	220	102	100	3	50	FRN225	275	02 / 35.00
66	220	102	100	3	60	FRN225	275	02 / 35.00
74	240	95	93	3	60	FRN200	250	02 / 35.00
81	346	64	62	3	50	FRS125	200	04 / 16.00
82	380	59	57	3	50	FRS120	175	04 / 16.00
83	380	59	57	3	60	FRS120	175	04 / 16.00
84	400	56	54	3	50	FRS110	175	04 / 16.00
85	415	55	53	3	50	FRS110	175	04 / 16.00
88	440	52	50	3	50	FRS110	175	04 / 16.00
94	440	52	50	3	60	FRS110	175	04 / 16.00
96	480	48	46	3	60	FRS100	150	06 / 10.00
98	600	38	36	3	60	FRS80	125	08 / 10.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Dryers

76” Dryers with Non-inverter blowers — 7676TG1L, TG1R, TS1L, TS1R

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Dryers

76” Dryers with Inverter Blowers — 7676 TG1L, TG1R, TS1L, TS1R

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Table 1 Specifications (Largest motor: 40HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2 TG1L, TG1R	Running Amps See note 2 TS1L, TS1R	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
						Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	111	109	3	50	FRN175	225	02 / 35.00
52	208	107	105	3	60	FRN175	200	02 / 35.00
62	220	102	100	3	50	FRN175	200	02 / 35.00
66	220	102	100	3	60	FRN175	200	02 / 35.00
74	240	95	93	3	60	FRN150	200	02 / 35.00
81	346	64	62	3	50	FRS90	135	04 / 16.00
82	380	59	57	3	50	FRS90	135	04 / 16.00
83	380	59	57	3	60	FRS90	135	04 / 16.00
84	400	56	54	3	50	FRS90	125	04 / 16.00
85	415	55	53	3	50	FRS80	100	04 / 16.00
88	440	52	50	3	50	FRS80	100	04 / 16.00
94	440	52	50	3	60	FRS80	100	04 / 16.00
96	480	48	46	3	60	FRS70	90	06 / 10.00
98	600	38	36	3	60	FRS60	80	08 / 10.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Dryers

76” Dryers with Inverter Blowers — 7676 TG1L, TG1R, TS1L, TS1R

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Dryers

82” Dryers with Non-inverter Blowers — 8282 TG1L, TG1R, TS1L, TS1R

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Table 1 Specifications (Largest motor: 40HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2 TG1L, TG1R	Running Amps See note 2 TS1L, TS1R	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
						Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	121	119	3	50	FRN225	275	02 / 35.00
52	208	117	115	3	60	FRN225	275	02 / 35.00
62	220	112	110	3	50	FRN225	275	02 / 35.00
66	220	112	110	3	60	FRN225	275	02 / 35.00
74	240	105	103	3	60	FRN200	250	02 / 35.00
81	346	69	67	3	50	FRS125	200	04 / 16.00
82	380	64	62	3	50	FRS120	175	04 / 16.00
83	380	64	62	3	60	FRS120	175	04 / 16.00
84	400	61	59	3	50	FRS110	175	04 / 16.00
85	415	60	58	3	50	FRS110	175	04 / 16.00
88	440	57	55	3	50	FRS110	175	04 / 16.00
94	440	57	55	3	60	FRS110	175	04 / 16.00
96	480	53	51	3	60	FRS100	150	06 / 10.00
98	600	43	41	3	60	FRS80	125	08 / 10.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Dryers

82” Dryers with Non-inverter Blowers — 8282 TG1L, TG1R, TS1L, TS1R

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for Dryers

82” Dryers with Inverter Blowers — 8282 TG1L, TG1R, TS1L, TS1R

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Table 1 Specifications (Largest motor: 40HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2 TG1L, TG1R	Running Amps See note 2 TS1L, TS1R	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
						Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	121	109	3	50	FRN175	225	02 / 35.00
52	208	117	105	3	60	FRN175	200	02 / 35.00
62	220	112	100	3	50	FRN175	200	02 / 35.00
66	220	112	100	3	60	FRN175	200	02 / 35.00
74	240	105	93	3	60	FRN150	200	02 / 35.00
81	346	69	62	3	50	FRS90	135	04 / 16.00
82	380	64	57	3	50	FRS90	135	04 / 16.00
83	380	64	57	3	60	FRS90	135	04 / 16.00
84	400	61	54	3	50	FRS90	125	04 / 16.00
85	415	60	53	3	50	FRS80	100	04 / 16.00
88	440	57	50	3	50	FRS80	100	04 / 16.00
94	440	57	50	3	60	FRS80	100	04 / 16.00
96	480	53	46	3	60	FRS70	90	06 / 10.00
98	600	53	36	3	60	FRS60	80	08 / 10.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for Dryers

82” Dryers with Inverter Blowers — 8282 TG1L, TG1R, TS1L, TS1R

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for
DRYVAC 1 & DRYVAC 2

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Table 1 Specifications (Largest motor: 10HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	32	3	50	FRN70	125	08 / 10.00
52	208	31	3	60	FRN70	125	08 / 10.00
62	220	30	3	50	FRN70	125	08 / 10.00
66	220	30	3	60	FRN70	125	08 / 10.00
74	240	28	3	60	FRN70	100	08 / 10.00
81	346	19	3	50	FRS40	70	10 / 6.00
82	380	17	3	50	FRS35	70	10 / 6.00
83	380	17	3	60	FRS35	70	10 / 6.00
84	400	16	3	50	FRS35	70	10 / 6.00
85	415	15.5	3	50	FRS35	60	10 / 6.00
88	440	14.6	3	50	FRS30	60	10 / 6.00
94	440	14.6	3	60	FRS30	60	10 / 6.00
96	480	13.5	3	60	FRS30	50	10 / 6.00
98	600	11	3	60	FRS25	45	12 / 4.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for
DRYVAC 1 & DRYVAC 2

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

External Fuse or Breaker and Wire Sizes for DRYVAC 3

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Table 1 Specifications (Largest motor: 2HP)

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	7	3	50	FRN15	15	12 / 4.00
52	208	7	3	60	FRN15	15	12 / 4.00
62	220	6	3	50	FRN15	15	12 / 4.00
66	220	6	3	60	FRN15	15	12 / 4.00
74	240	6	3	60	FRN15	15	12 / 4.00
81	346	4	3	50	FRS15	15	12 / 4.00
82	380	4	3	50	FRS15	15	12 / 4.00
83	380	4	3	60	FRS15	15	12 / 4.00
84	400	4	3	50	FRS15	15	12 / 4.00
85	415	4	3	50	FRS15	15	12 / 4.00
88	440	3	3	50	FRS15	15	12 / 4.00
94	440	3	3	60	FRS15	15	12 / 4.00
96	480	3	3	60	FRS15	15	12 / 4.00
98	600	2	3	60	FRS15	15	12 / 4.00

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for
DRYVAC 3

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.

Shuttles and Conveyors 5

External Fuse or Breaker and Wire Sizes for

All Shuttles, Flat Bed Conveyors, & Load Conveyors

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Table 1 Specifications

Volt Code	Voltage (VAC) See note 1	Running Amps See note 2	Phase	Cycles (Hz)	Fuse OR circuit breaker		Wire size for 50 ft (15 m) run (AWG/mm²) See notes 4, 5
					Fuse (Amps) See notes 3, 5	Breaker (Amps) See notes 3, 5	
46	200	N/A	3	50	FRN15	15	14 / 2.5
52	208	N/A	3	60	FRN15	15	14 / 2.5
62	220	N/A	3	50	FRN15	15	14 / 2.5
66	220	N/A	3	60	FRN15	15	14 / 2.5
74	240	N/A	3	60	FRN15	15	14 / 2.5
81	346	N/A	3	50	FRS15	15	14 / 2.5
82	380	N/A	3	50	FRS15	15	14 / 2.5
83	380	N/A	3	60	FRS15	15	14 / 2.5
84	400	N/A	3	50	FRS15	15	14 / 2.5
85	415	N/A	3	50	FRS15	15	14 / 2.5
88	440	N/A	3	50	FRS15	15	14 / 2.5
94	440	N/A	3	60	FRS15	15	14 / 2.5
96	480	N/A	3	60	FRS15	15	14 / 2.5
98	600	N/A	3	60	FRS15	15	14 / 2.5

Notes

1. Not all voltages available in all models.
2. Running amps are for the portion of the cycle with the highest, steady-state demand (after the motor is up to speed) and are approximate.
3. If fuses are used, they must be Bussmann Fusetron or similar lag type. If standard circuit breakers are used, they must match the amperage rating listed in the "Breaker" column. If inverse time circuit breakers are used, they must match the characteristics (amperage rating) listed in the "Fuse" column. An over-sized fuse or breaker poses a fire hazard (see caution below). An under-sized fuse or breaker will trip needlessly.
4. Wire size is per the USA National Electric Code. **Use wire size shown for runs up to 50 feet (15 meters). Use next larger size for runs 50 to 100 feet (15 to 30 m). Use wire two sizes larger for runs greater than 100 feet (30 m).** Under-sized wiring poses a fire hazard (see caution). This can also cause voltage drops even if the wire's current-carrying capacity exceeds that of the fuse/breaker. Voltage drops cause machine faults and reduce motor starting torque (e.g., a 5% voltage drop causes a motor to produce only 90% of rated torque). Voltage drop is greatest the instant the motor is energized, when highest torque is required.
5. See document BFUUUF01 “External Fuse...Requirements” for more information.

External Fuse or Breaker and Wire Sizes for

All Shuttles, Flat Bed Conveyors, & Load Conveyors

CAUTION:

Fire hazard — An over-sized fuse/circuit breaker or under-sized wiring can permit the wiring to overheat and cause a fire.

- Always use the fuse/circuit breaker and wire size specified here.